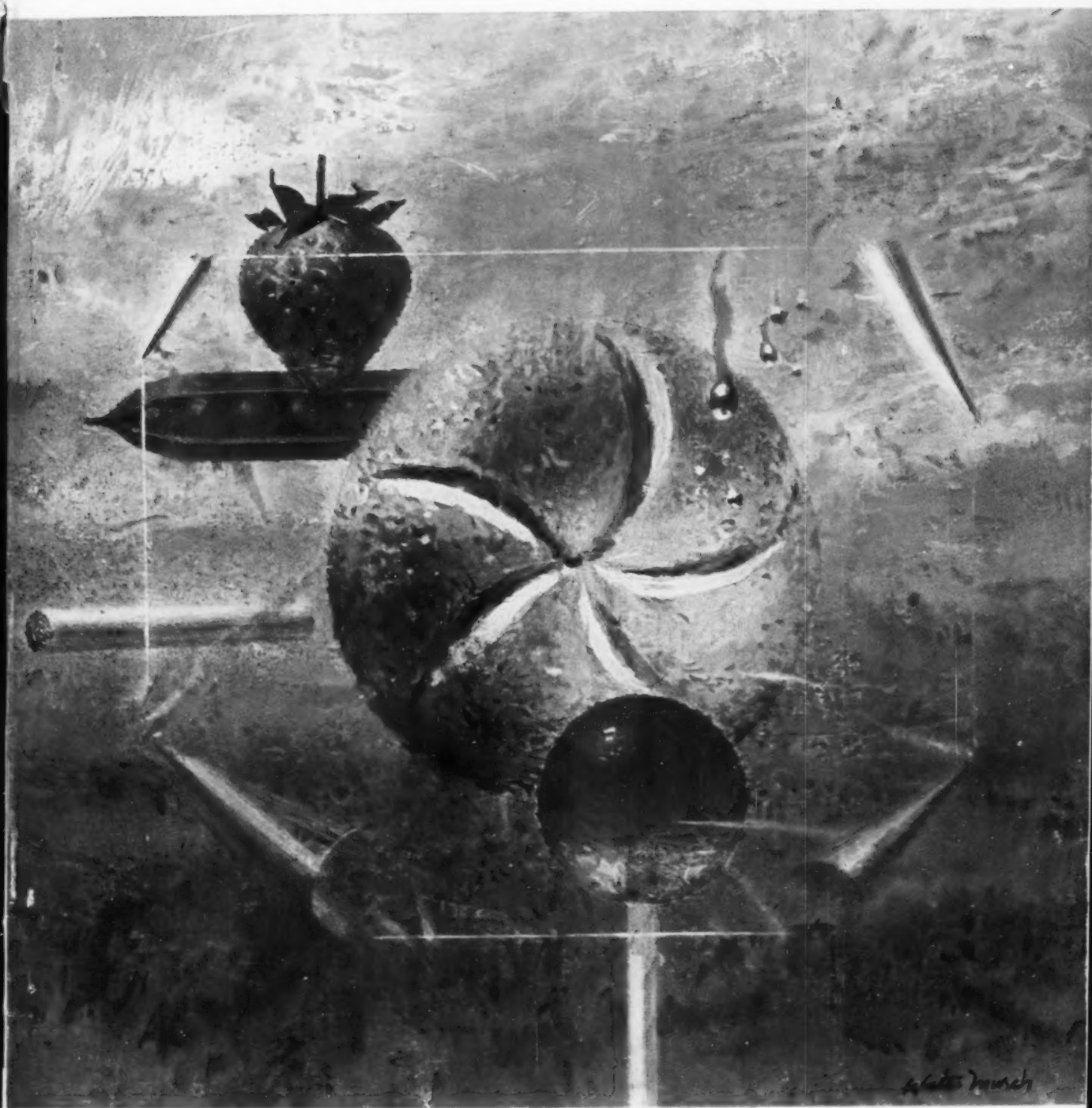
MODERN PACKAGING

January



AN ORIGINAL OIL PAINTING FOR MODERN PACKAGING BY WALTER MURCH

GREAT PACKAGING DISCOVERIES: *Moistureproof cellophane—p. 82*

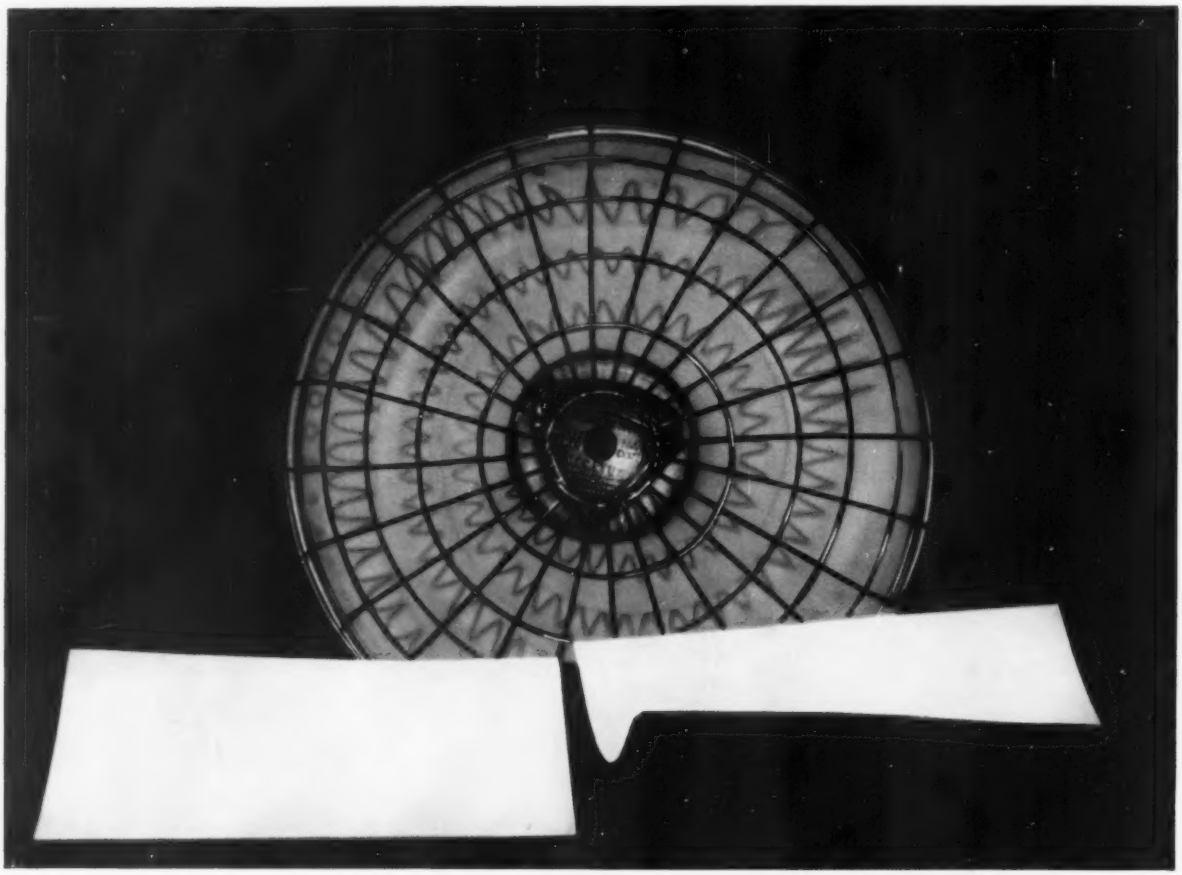
JANUARY 1959

Background for Packaging p. 37

A NEW FEATURE: *World Report, p. 57*

Complete contents p. 2

LAYFLAT ADHESIVES for lining, combining, mounting and laminating



HEAT TEST SHOWS CURL RESISTANCE

We've taken the curl out of adhesives. The above photo proves it. At left is a Layflat Adhesive lamination of paper to chip board that refused to curl after prolonged heat drying at 175°F. At right is similar dextrine adhesive lamination that began to curl in less than a minute.

Non-curling Layflat Adhesives make converting simpler. With fewer machine jam-ups. Easier printing. Fewer rejects. Fewer complaints. Too, these chemically balanced adhesives permit thinner films to give extended coverage. Cost is surprisingly low.

Layflat Adhesives run equally well on Parry Liners and New Jersey, Waldron, Potdevin, Andre and similar machines. We'd like to demonstrate their curl resistance in your own plant. To make arrangements, write or call your nearest National office.

RESYNS® National ADHESIVES

NATIONAL STARCH PRODUCTS INC.

750 Third Avenue, New York 17 • 3641 So. Washtenaw Avenue, Chicago 32 • 735 Battery Street, San Francisco 11

Blankets by Arnall Mills, Inc., Sargent, Georgia,and Arnco Mills, Inc., Newnan, Georgia

FOR THE SKIN *they hardly know* THEY TOUCH!

VITAFILM, now at the lowest price in history,* does a stunning selling-plus-protection job for textiles! It is the one pleasing-to-touch transparent film that actually **transmits the true texture,** fine "feel" and color of the merchandise **right through the package.** What's more, VITAFILM **heat-seals perfectly** to a lasting, welded seam—**adapts** easily to **high-speed automatic machine operation,** prints beautifully. And this crystal-clear transparent film **doesn't attract dust**—doesn't "brittle" with age—keeps merchandise **mill-fresh, prevents broken wraps and soilage!** For proof without high pressure, contact: Goodyear, Packaging Films Dept. A-6418, Akron 16, Ohio.

Vitafilm BY GOODYEAR

*Now priced right on the button with the most common of the low-priced three in transparent packaging!

Vitafilm, a Polyvinyl chloride—T. M. The Goodyear Tire & Rubber Company, Akron, Ohio

January 1959 THIS MONTH IN

71 The challenges ahead
For the smart packager, developments in 1958 have created major opportunities in the year ahead for lower costs, higher efficiency, new and larger markets and improved competitive status. These opportunities are represented in new materials, new container applications, engineering advances and the strategy of dynamic merchandising. You can use this article as a valuable guide to a more prosperous 1959.

79 Fish in film
How a Los Angeles marketer has reached record sales volume by switching from bulk selling to transparent film bags with complementary color designs for a line of smoked and pickled fish products. It's proof again that merchandising methods that were "good enough" in Grandpa's day can't compete successfully in today's more demanding markets.

NEW **World Report: abstracts from foreign magazines, p. 57.**

80 Million-dollar pajama package
This big investment has put Schrank sleepwear in a strong marketing position, with dual, tear-apart polyethylene bags to promote multiple sales; pictorial inserts that discourage before-purchase opening of the bag; pre-ticketing, and permanent self-selection displays. The successful project should be of interest to all manufacturers who have the problems of packaging a wide line of fashion merchandise.

SEE **Background for Packaging: notes, quotes & comments, p. 37.**

82 Moistureproof cellophane
MODERN PACKAGING presents the first article in a new cover series titled *Great Packaging Discoveries.* These articles will emphasize that progress in packaging is dependent on new ideas from men like those in your own laboratory. By probing into the great developments of the recent past, we hope to show how *you* can help make new discoveries. For example, the achievement of moistureproof cellophane, which opened a new world of protective film packaging, came about because dedicated researchers in Du Pont's labs saw the need and the opportunity.

84 Design Histories
Best examples of the month in brief.

88 Merry sales story
Testimony to the power of effective packaging is the 277-fold sales increase enjoyed by this Cincinnati toy maker in 10 years. Merry's success is founded on an appealing product merchandised in practical, yet utilitarian packages that in most cases have important play value in themselves.

90 No-contact glass lines
In a triumph of engineering that takes the limit off jar-filling speeds by eliminating contact breakage from unscrambler to capper, Gerber Products runs a completely automatic 600-per-minute (potential speeds are double that) baby-food jar line in which glass never touches glass. It will be watched by all packagers interested in high-speed, economical glass packaging.

94 Packaging Pageant
Pictorial review of noteworthy new packages.

100 Holloway House steps out
A relative newcomer to the field of high-quality frozen foods, this company is using seven new packaging features (including a quick-heating black-bottom aluminum pan in each carton) to improve its sales position in a highly competitive field.

NOW **Memo from the Editors in new location, p. 69.**

102 Dynamic design for profesional line
For many companies, a package-revamping program begins and ends with a colorful new family design. But here's the success story of American Optical Co., a giant in the eyeglass business. Not only has it gained strong new brand identity for its 2,000 products, but it has cut costs as much as 70%.

104 Display Gallery
Outstanding ideas for package merchandising.

106 Foil pre-wrap for wine
Mogen David hits the holiday gift market with a $1 bottle of wine in a beautifully designed four-color foil-wrapped carton with a disposable printed cellophane overwrap. It may point the way for other gift-adaptable products in the $1 range.

110 Multi-purpose display
To packagers of products whose bulk or shape makes them difficult to display at retail, there's

MODERN PACKAGING®

Volume 32, Number 5

Departments

126 Equipment & Materials
Suppliers' announcements of new products.

136 Plants & People
Monthly record of expansions and promotions.

148 For Your Information
Association activities, events, book reviews.

152 U. S. Patents Digest
Abstracts of new issues affecting packaging.

175 Manufacturers' Literature
Checklist and postcard for your convenience.

192 Index to Advertisers
Handy way to find the news in the ads.

food for thought in the 10-fold sales increase reaped by American LaFrance since adopting a rugged bleached corrugated dispenser that shows off four round-bottomed home fire extinguishers. The big sales gain and the fact that the display protects the products during shipment more than justify an increase in packaging costs.

Technical & Engineering

113 Polypropylene film
Here's the first report on the packaging properties of this new member of the polyolefin family, comparing its qualities with those of the polyethylenes. The great impact and tensile strength of polypropylene indicate big potentials in the bag or overwrap field for packaging irregular, pointed or sharp-cornered products. Thermoforming also appears to be a promising end use for this tough new film. *By Bruce M. Miller.*

118 Moisture-resistant corrugated
Shipping tests conducted with hydrocooled peaches show that a new wax-impregnated containerboard retains its rigidity, protects the product and is unaffected by water soaking. The general acceptance of this low-cost board for fabricating bulk containers would be a revolutionary step away from the standard shippers that have been used by Southern growers for many years. *By E. Evan Brown and Wendell H. Thomas.*

124 Questions & Answers
Advice on readers' technical problems.

ABP ABC

MODERN PACKAGING
Executive and Editorial
575 Madison Avenue
New York 22, New York

Please mail all correspondence, change of address notices, subscription orders, etc., to the above address.

Modern Packaging issued monthly except November when issued semi-monthly by Modern Packaging Corp. and Packaging Catalog Corp. at Emmett St., Bristol, Conn. Second-class postage paid at Bristol, Conn. Subscription rates (including Modern Packaging Encyclopedia Issue), payable in U. S. currency: In U. S., its possessions and Canada, 1 year $7, 2 years $12, 3 years $17; all other countries, 1 year $25, 2 years $45, 3 years $60. Single copies in U. S., its possessions and Canada, 75 cents each (Show Issue, $1; Encyclopedia Issue $3); all other countries $2.50 (Show Issue $3; Encyclopedia Issue, $6).

Contents copyrighted 1958 by Modern Packaging Corp. All rights reserved, including the right to reproduce this book or portion thereof in any form.

Printed in U.S.A. by Hildreth Press, Inc., Bristol, Conn. Member, Audit Bureau of Circulations. Member, Associated Business Publications. Modern Packaging is regularly indexed in the Industrial Arts Index. ® Reg. U. S. Pat. Off.

Chairman of the board
Charles A. Breskin

President and publisher
Alan S. Cole

Editor
Lloyd Stouffer

Senior editor
Pearl Hagens

Managing editor
Thomas M. Jones

Associate editors
Gladys Tarragano
William C. Simms

Engineering editor
Robert J. Kelsey

Technical editor
Charles A. Southwick, Jr.

Midwest editor
Sarah Lee Gerrish (Chicago)

Assistant editor
Roland R. MacBride

Reader service editor
Florence Getter

Patents editor
H. A. Levey

Art director
Donald R. Ruther

Production
Daniel M. Broads, *director*
Bernard J. Farina
Verna Retzlaff

Circulation
Robert Birnbaum, *director*
George Leiz, *subscription manager*

Promotion
Philip W. Muller, *manager*

Treasurer
Beatrice Grove

Business staff
M. A. Olsen
P. H. Backstrom
B. W. Gussow
R. C. Nilson
S. S. Siegel, *business manager*
B. R. Stanton

Chicago 11, 101 E. Ontario St.
Phone DElaware 7-0060
James M. Connors, *vice president*
William F. Kennedy
H. R. Friedman

Cleveland 20, 3537 Lee Rd.
Phone SKyline 1-6200
Robert C. Beggs

Los Angeles 48, 6535 Wilshire Blvd.
Phone OLive 3-3223
James C. Galloway

London E. C. 4, England
29 New Bridge St.,
Phone CIty 3049
T. G. Rowden

Frankfurt, Germany
Wittelsbacher Allee 60
Phone 46 143/46 372
Georg J. Linder

One operator turns out 45, 50 or more complete packages per minute with this simple-to-operate, efficient cartoner, yours at low cost.

You've never seen a cartoner like this one before...!

Now, just *one* compact, efficient machine—with just *one* operator, will give you 10,000—15,000—18,000 finished packages a day. You waste no plant space, carry no extra investment burden for multiple machine units, to get the production boost and the cost cuts made possible by REDINGTON's *entirely new* "Automax" Cycle Cartoner.

For a main product, supplementary items, special sizes, introductory and sample packages, fill-in runs—if you package in reverse tuck folding cartons, the "Automax" does the *whole packaging job.*

Remember, with only one operator you'll be getting a volume it takes two, three or more to produce manually. In plants where this new REDINGTON is already in daily production, it is turning out a steady 40 to 50 packages a minute, all day long.

The "Automax" is highly efficient yet simple in design. Any girl can learn how to operate it in far less time than it takes to train workers for manual packaging. In addition to keeping the carton magazine filled, she performs just two actions: she places an item to be cartoned in each of three loading troughs in front of her—then pushes the slide forward and back.

The "Automax" does all the rest automatically—feeds and forms cartons, places them in the carton conveyor pockets, tucks in the end flaps after the items are inserted, discharges the finished packages, restarts the cycle.

Just 70" long, 30" wide, weighing only 750 lbs., caster mounting lets you move the "Automax" easily wherever you need it in your plant to fit in comfortably even where floor space is limited. And it's easy to service, easy to adjust by ordinary plant personnel—it doesn't take a master mechanic to handle the job!

The "Automax" is built with all the engineering skill, attention to details and insistance on top-quality materials which have made REDINGTON equipment world-famous wherever automatic packaging is performed. That means you're sure of long, trouble-free service.

REDINGTON "Automax" CYCLE CARTONER

- **one operator produces 45-50 or more filled packages per minute — a whole-job operation**
- **convenient size—30" wide, 70" long, caster mounted**
- **costs just $4,750.00 (plus freight)**

is priced to fit your budget. *You can have the "Automax" installed and turning out steady production for less than $5,000!* Compare this with what you pay one employee annually—not to mention overhead on that expense. And remember, no supplementary machine investment is required—you get *whole-job cartoning* with the single efficient "Automax" unit!

★ WRITE—NOW—FOR COMPLETE DETAILS . . .

An illustrated folder tells the whole story of the new "Automax"—specifications, method of operation, capacity, etc. Send for your copy today!

REDINGTON
AUTOMATIC MACHINES for CARTONING
WRAPPING • SPECIAL PACKAGING

F. B. REDINGTON CO.
3010 ST. CHARLES ROAD, BELLWOOD, ILLINOIS
Chicago Phone: AUstin 7-4200
Verona, New Jersey . . CEnter 9-4608

PACKAGES FOR PERFORMANCE

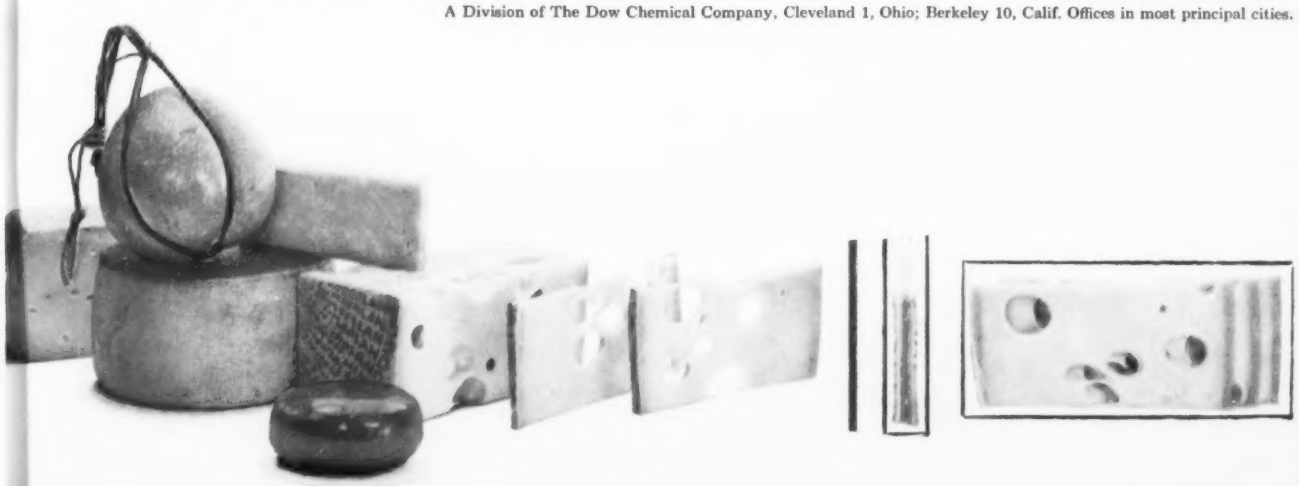
Dobeckmun's most revolutionary ideas in packaging were originated to solve individual marketing problems. For example, Durafilm Pouches were developed to reduce the marketing costs of big volume items. Being ready-made, pouches of transparent Dobeckmun Durafilm eliminate a costly and time-consuming step in the selling of products pre-packaged for self-service. Long-lasting protection, eye appeal, ready identification of your brand are advantages you can always afford at Dobeckmun where *your* costs are always *our* consideration. The packaging you are looking for may not exist today, but it will tomorrow—when you put Dobeckmun to work.

Customers recognize at once the quality of attractive, appetizing Swift processed meats *vacuum-packed* in Dobeckmun Durafilm Pouches. Rugged, long-lasting protection and ease of filling have made Durafilm Pouches the preferred packaging medium for 14 products of Swift & Company.

DOBECKMUN

Dobeckmun Durafilm Pouches help processed foods preserve a tempting fresh-sliced look. Perfectly transparent Durafilm leaves nothing to the imagination of the customer. Today's mass marketing compels you to offer your goods in packages that sustain the old-fashioned intimacy between the customer and her purchase. Whatever your product, it will look better and sell better at lower cost to you in packages for performance by **The Dobeckmun Company,**

A Division of The Dow Chemical Company, Cleveland 1, Ohio; Berkeley 10, Calif. Offices in most principal cities.



Golden crown adds splendor to new package

This beautiful and unusual closure dramatically identifies the package with the product's famous crown trade-mark.

But its size and complex design required an exacting production technique. Three separate parts were carefully formed and joined in a single unit with perfectly matched ornamentation, then finished in gleaming gold lacquer. For either intricate design or stock closure, talk with your Armstrong man. Armstrong Cork Co., Lancaster, Pa.

Armstrong PACKAGING

GLASS CONTAINERS • CEL-O-SEAL® BANDS (®E. I. DU PONT DE NEMOURS & CO., INC.) • METAL CAPS • MOLDED CAPS • EMBOSSED-TOP CORKS • PACKAGE DESIGN

FIRST... UNDER PRESSURE

Pressure packaging is pushing many different kinds of products to the top in today's tougher sales race . . . with the help of Crown. Crown made the first aerosol package . . . has produced more than any other manufacturer . . . is the only source of both seamless and fabricated aerosol containers. Crown research, experience and facilities are unexcelled in the aerosol packaging field. Let us show you how to put your product under pressure . . . profitably.

for cans · closures · crowns · machinery

CROWN

CROWN CORK & SEAL COMPANY, INC.
9300 Ashton Road, Philadelphia 36, Pa.

Pillsbury has a reason...

Whip up a cake batter from Pouch A . . . sprinkle Pouch B over the top . . . pour on a little water . . . and bake a delicious Pillsbury pudding cake. A delight for speed and ease . . . but *taste* is the ultimate test. That's why Pillsbury emphasizes *protective* packaging in their bid for repeat sales . . . using special Riegel papers in both pouches.

It's one more proof that *protected by Riegel* means extra benefits . . . product protection always, plus flexible packaging materials that are:

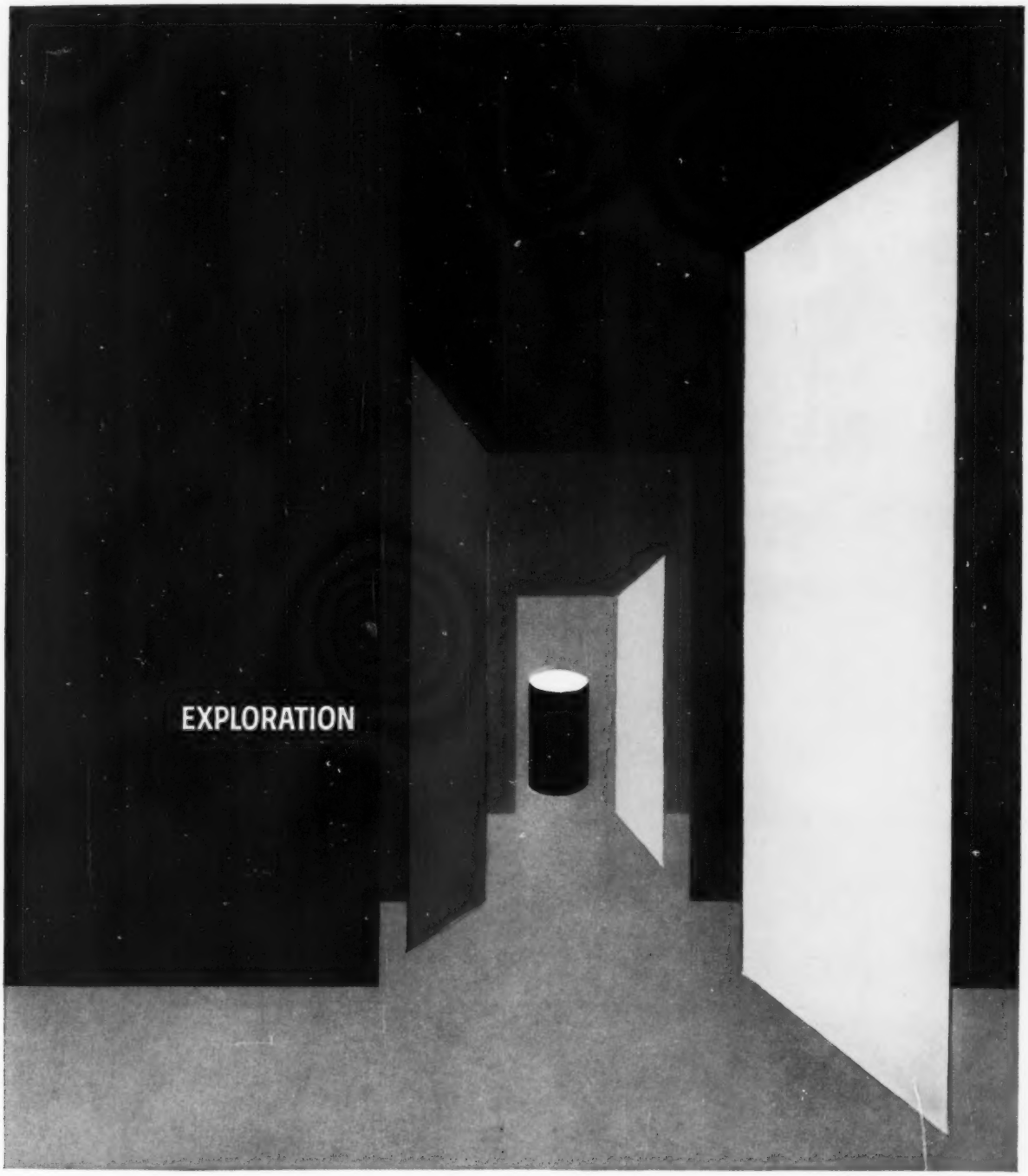
. . . tailored to run at high speeds on automatic machines
. . . made to your own specifications; printed, waxed, coated and laminated combinations of all types
. . . packaging materials that are made right, run right and are priced right.

Hundreds of today's best sellers benefit from Riegel's uniformly effective system of product protection. You can too. Write Riegel Paper Corporation, 260 Madison Avenue, New York 16.

Riegel

PROTECTIVE PACKAGING MATERIALS

Pillsbury Pudding-Cake is packaged in two protective pouches . . . sauce mix in poly-coated pouch paper, cake mix in a laminate of pouch paper and foil. Both webs are printed by Riegel and run at high speed on Bartelt equipment



A really significant advance in packaging technology calls for patient minds eager to explore every possibility. For the people at Canco, this constant search for new and better ways has long been a successful habit—proved by Canco's many canning "firsts." That's why a close working relationship with Canco can help you to a more efficient operation, *a more salable product*. Explore the benefits of Canco's alert, imaginative service by calling our nearby representative!

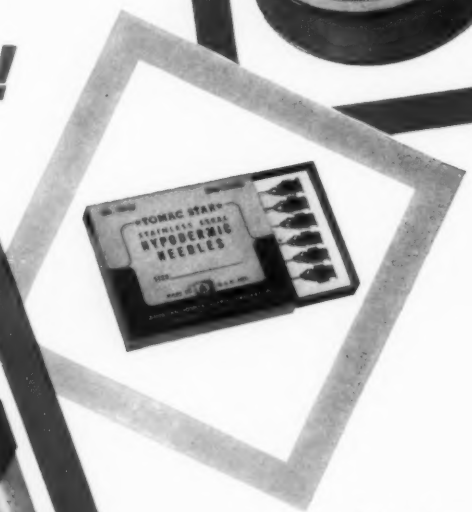
CANCO *Division* AMERICAN CAN COMPANY

NEW YORK · CHICAGO · NEW ORLEANS · SAN FRANCISCO

Rowell boxes

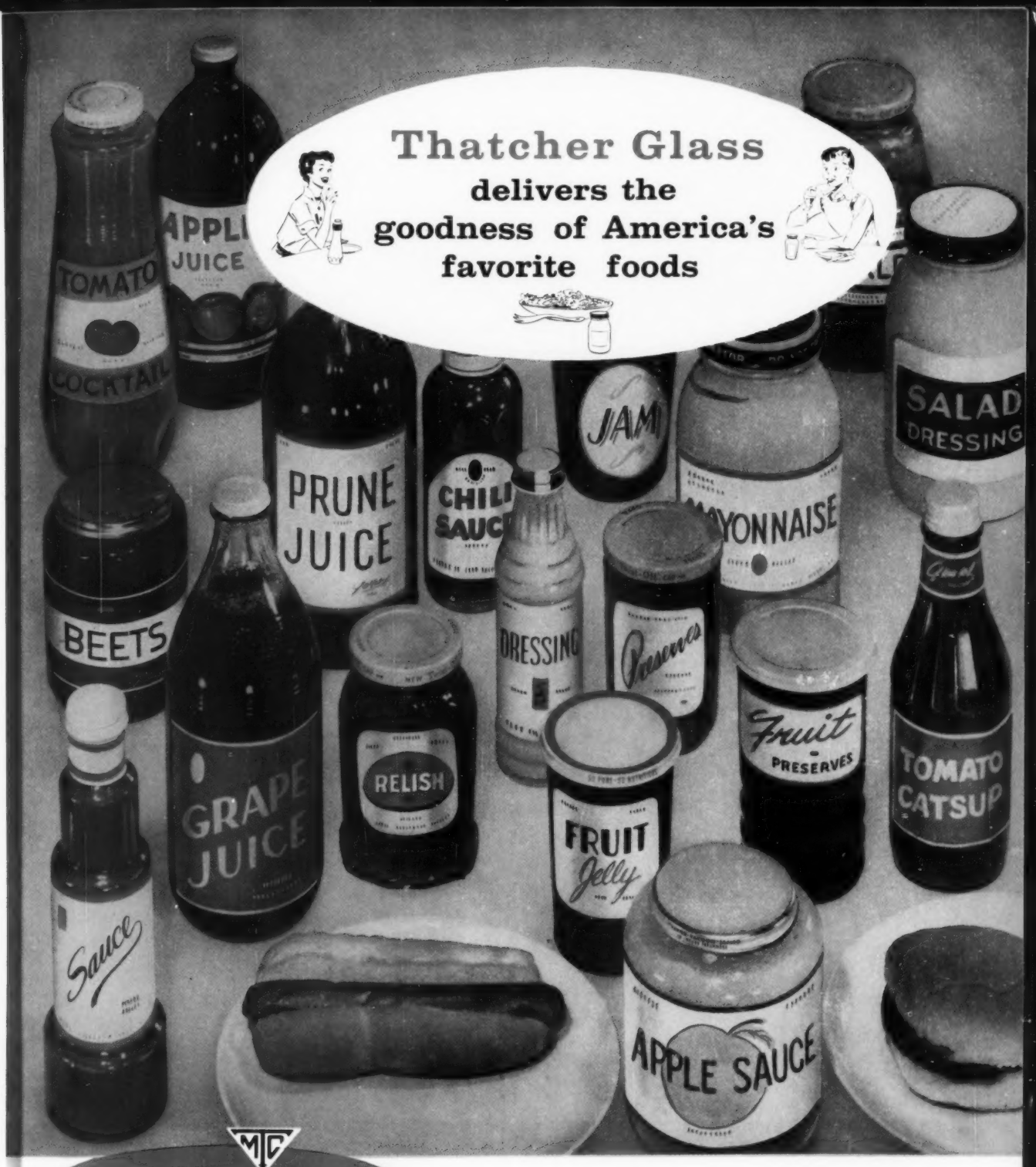
keep fine products

on the move!



Set-up boxes in a wide range, made for Cosmetic & Drug Trade throughout the United States. Inquiries also invited from box users in other lines

E. N. Rowell Co.
INC.
BATAVIA, NEW YORK



Thatcher Glass

Glance in any refrigerator or pantry and you'll discover one important reason why more women buy more products packaged in glass. It's simply that homemakers have found they can store just about any food safely and conveniently in glass . . . and always tell "how much is left", too. Of course, Thatcher can do a lot to help you make sure they'll select *your* brand from the shelf. Thatcher jars and bottles are designed to stay better-looking, longer . . . to add sparkle to the appetite appeal of your product. Whether you package in a private-mold or standard container, by all means talk to the man from Thatcher. He is a packaging expert whose experience is at your disposal.

THATCHER GLASS MANUFACTURING COMPANY, INC., NEW YORK, N. Y.

FACTORIES: Elmira, N. Y., Jeannette, Pa., Streator, Ill., Lawrenceburg, Ind., Saugus, Calif.
SALES OFFICES: Elmira, N. Y., Boston, Hartford, New York, Philadelphia, Detroit, Chicago, Minneapolis, Louisville, Los Angeles, San Francisco, St. Louis

TOP PROTECTION!

Patio Foods, Inc., goes all out with

REYNOLDS WRAP ALUMINUM PACKAGING

PATIO FOODS, INC., of San Antonio, uses three forms of Reynolds Wrap Aluminum Packaging to achieve the utmost in *quality protection* and *convenience* for its Mexican Style Dinner. First is the compartmented tray—one of Reynolds complete line of containers. Over this is a plain foil cover crimped on by the new Reycon Tuckwrap machine developed in conjunction with Hayssen. Finally, the covered tray goes into a carton which is then heat-sealed in a Reyseal® overwrap, gravure-printed by Reynolds in colorful *serape* design.

This package provides maximum protection against moisture-loss or freezer-burn, against light rays that can affect fats, against oxidation and the escape of flavor volatiles. Moreover, the high conductivity of aluminum maintains lower temperatures in freezer cabinets...and also speeds oven-heating in the home. So the end result is as luscious as the picture on the outside!

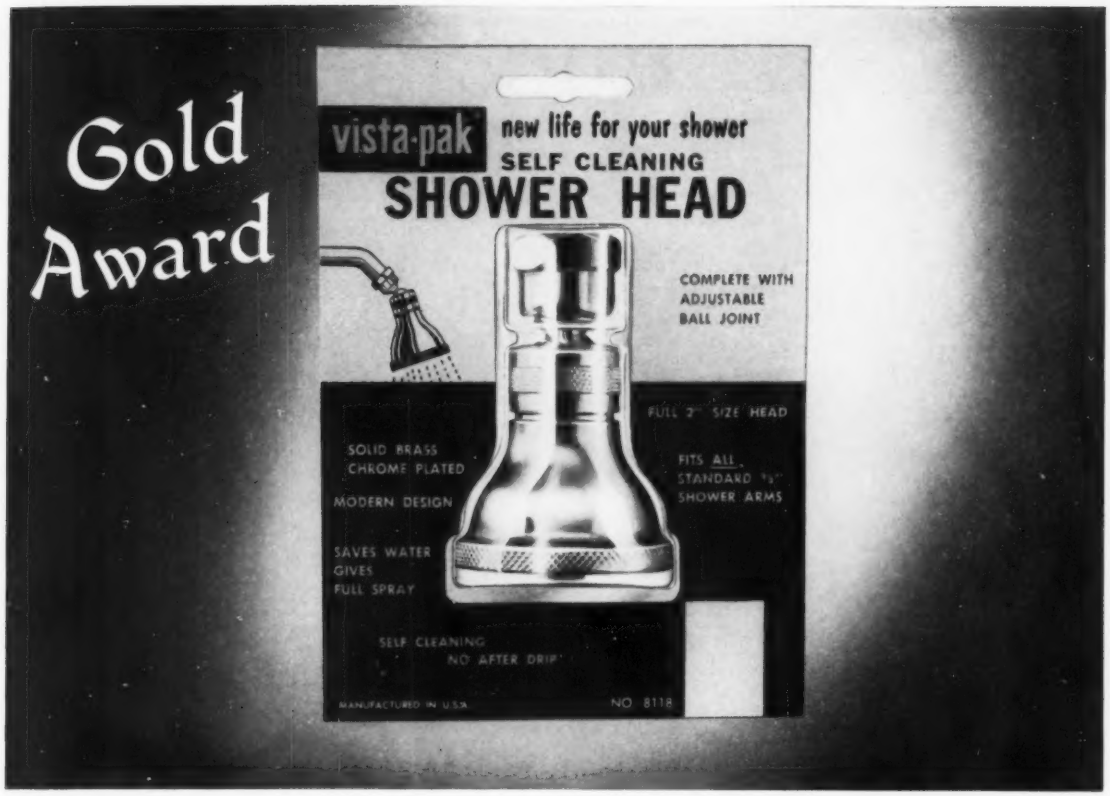
Whatever protection your product requires, Reynolds Wrap Aluminum Packaging can supply it...together with sales-boosting eye-appeal. And compared with all other marketing factors, the *relative* cost will be low...the return on the investment very high. This is what we mean by the "New Economics" of Reynolds Wrap Aluminum Packaging. Let our representative tell you more about it...and also show you an important motivational study: "The Image of Aluminum Foil". Call any Reynolds sales office. Or write **Reynolds Metals Company,** Richmond 18, Va.

...including the Packaging Seal that adds BRAND POWER PLUS! Surveys prove 8 out of 10 women know this seal, 7 out of 10 of them prefer products carrying it. Intensively promoted!

REYNOLDS ALUMINUM

Watch Reynolds New TV Shows "Walt Disney Presents" and "All Star Golf" Every Week on ABC-TV.

PATIO
quick frozen
MEXICAN
Style
DINNER
TAMALES & GRAVY, RICE, BEANS,
BEEF ENCHILADA AND CHILI
MADE IN TEXAS
PATIO'S Flavor OF OLD MEXICO
NET
1 lb
WEIGHT
QUALITY
PROTECTED WITH
Reynolds Wrap
ALUMINUM
PACKAGING



Acetate Sheeting...

by **Joseph Davis Plastics Co.** was used by the **Keystone Brass and Rubber Co.**, Hatboro, Pa. in the packaging shown above, which won the 1958 Gold Award presented annually by Variety Store Merchandiser for distinction in packaging in the variety store field. The selection of this perfect packaging material is another instance of smart merchandising by a company that knows the importance of good packaging.

Economical JODA acetate sheeting may be just the material to solve your packaging problem. It has a long shelf life and will take all the hard knocks of shipping, storage and display without losing the crystal clear transparency and smart good looks that flatter your product.

JODA extruded acetate sheets, rolls and film in all gauges — transparent, translucent or opaque — are excellent for vacuum forming. Remember, your product must be SEEN to be SOLD — and it's seen best through protective packaging made of JODA acetate. Write for information and samples.

JOSEPH DAVIS PLASTICS CO.

430 Schuyler Ave.
Kearny, N. J.

Phone
WYman 1-0980
N. Y. BArclay 7-6421

your product belongs

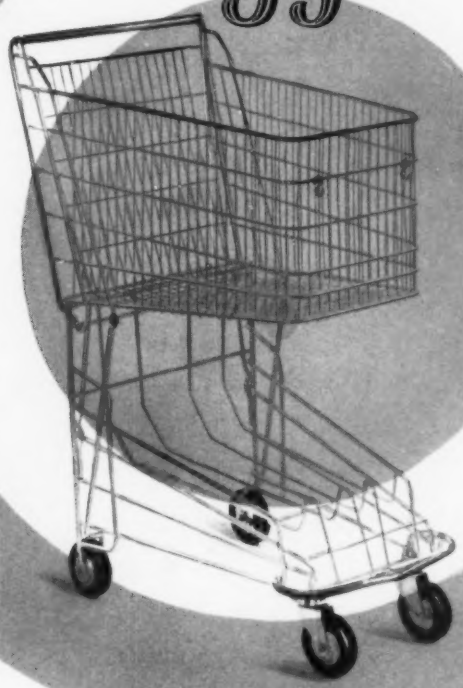
in glass by Brockway

Just as a boy and his Dad go hand in hand, so do consumer acceptance and products packaged in glass. • Your product can win this coveted consumer acceptance when presented in an attractive glass container by Brockway. • Products packaged in glass have proven themselves to be the products most readily accepted on sight by the consumer. Seeing is believing . . . and when they see your product displayed in a glass container, consumer acceptance is assured. • A product that is worthy of consumer acceptance deserves a quality glass container by Brockway.

SYMBOL OF QUALITY — GLASS CONTAINERS

BROCKWAY GLASS
COMPANY, INC., Brockway, Pennsylvania
Sales Offices in Principal Cities

TARGET FOR '59



RIGHT IN THE BASKET!

EACH CELLU-CRAFT
DESIGNED AND PRODUCED
FLEXIBLE PACKAGE ATTRACTS
THE CONSUMER... SELLS THE PRODUCT.
USE CELLU-CRAFT PACKAGING AS YOUR AIMING
DEVICE IN '59! YOU'LL HIT YOUR SALES TARGET
EVERY TIME AND HAVE A VERY HAPPY NINETEEN FIFTY NINE!

CELLU-CRAFT
PRODUCTS CORPORATION

Designers, Color Printers and Converters of Flexible Packaging Materials

General Offices & Plant: **1401 4th AVE., NEW HYDE PARK, N. Y., PRIMROSE 5-8000** *Sales Offices in principal cities*

PRINTED CELLOPHANE • POLYETHYLENE • PLIOFILM • FOIL • ACETATE • GLASSINE • in ROLLS • SHEETS • BAGS • POUCHES • ENVELOPES

dual purpose

duaflex

INK FOR FILMS, FOIL, PAPER AND BOARD

- greater economy
- excellent printability
- quality engineered
- faster drying
- maximum adhesion
- wide color range
- high gloss
- tough, flexible ink film

You'll find the answer to the problems of old-fashioned packaging inks when you try dual-purpose DUAFLEX. A unique, cosolvent ink, DUAFLEX will produce equally outstanding results on either Flexo or Gravure jobs. It helps you minimize your inventory by replacing expensive specialized inks. Vastly superior to conventional inks for wet packaging, DUAFLEX is your absolute assurance of premium results every time. Call an S&V representative today and have a test run on your next job. You'll agree, there is less trouble and more profit for you with DUAFLEX.

S&V®

Sinclair and Valentine Co.

DIVISION OF AMERICAN-MARIETTA COMPANY

611 West 129th Street • New York 27, N. Y.

Canadian Affiliate: SINCLAIR AND VALENTINE CO. OF CANADA, LTD., 240 Madison Avenue, Toronto 7, Canada

Headquarters for SPECIFICATION ADHESIVES

ARABOL

MOISTURE-RESISTANT ADHESIVES

A steaming bathroom puts your label and package adhesives to a tough test. Unless they have been *specification-formulated* to include moisture-resistance, the bottle label can wrinkle and fall off—the paper package can come apart.

Moisture-resistance—through ARABOL Specification Adhesives—has been carried from the bathroom to the point where cases of food and drugs are floated ashore from supply boats.

The adhesives for *your* product, package, label or shipping case may require special qualities pertaining to moisture, dryness, heat, cold, alkalinity, toxicity, odor, flavor, flexibility, rigidity...or the conditions under which your adhesives are applied...and how your product is used, transported, stored or re-used.

Adhesives made to meet each of your particular requirements cost little more (and sometimes less) than run-of-mill adhesives. The advantages and savings are appreciable.

We invite the opportunity to submit formulated samples—for tests to be made in your own plant—under your particular working conditions. That is the one kind of testing that assures you of satisfactory results.

Our fourteen plants and warehouses—plus four laboratories—are your assurance of service and delivery. It is our privilege to serve both large and small users. May we send you a booklet suggesting 23 basic specifications you should consider before you next buy adhesives?

THE **ARABOL** MFG. CO.
a nationwide organization serving major users of industrial adhesives
EXECUTIVE OFFICES: 110 East 42nd Street, New York 17, N.Y.
CHICAGO • SAN FRANCISCO • LOS ANGELES • ST. LOUIS • ATLANTA
PHILADELPHIA • BOSTON • PORTLAND, Ore. • ITASCA and
McALLEN, Tex. • CINCINNATI • DENVER • TAMPA • LONDON, Eng.

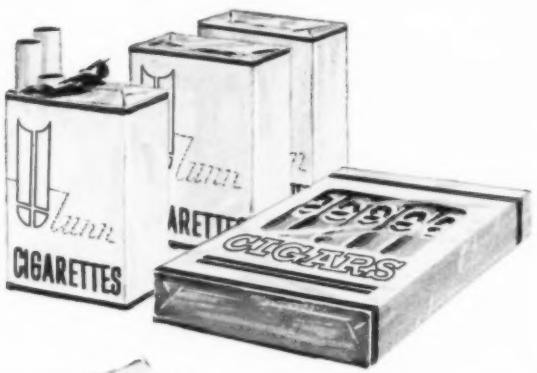
74 YEARS OF PIONEERING IN THE MAKING OF ADHESIVES

Announcing:

paper
napkins
PAPER
CUPS
PLATES

DRESS
SHIRT

Cupcakes
Baked Goods


CIGARETTES
CIGARS

CEREAL

Potato
Chips

Super Dylan

FILM *for* PACKAGING

Glass-like clarity—clearer than any other high-density polyethylene film...
Superb printability...Tears without tear tape

Now commercially available! SUPER DYLAN polyethylene film—an all-new packaging material. It has greater clarity than any other high-density polyethylene film.

SUPER DYLAN film is ideal for packaging paper products, baked goods, tobacco products, cereals, knitwear, textiles—soft goods of all types. It's more economical than cellophane!

SUPER DYLAN film is strong and crack-proof. It adds longer shelf life to your products; is unaffected by dry or humid conditions; has excellent low-temperature properties. And, what's more, it tears in a straight line *without* tear tape.

SUPER DYLAN film can be heat-sealed, too. And, it handles easily in bag-making and over-wrapping equipment because it's non-blocking, resists stretching and has sufficient stiffness for push-feeding.

For more information, and a free sample, just fill in and return the coupon.

Koppers also produces these other fine plastics for packaging: DYLITE expandable polystyrene, DYLENE polystyrene and DYLAN polyethylene.

DYLITE, DYLENE, SUPER DYLAN and DYLAN are registered trademarks of Koppers Company, Inc.

KOPPERS

Offices in Principal Cities • In Canada: Dominion Anilines and Chemicals Ltd., Toronto, Ontario

KOPPERS PLASTICS

Koppers Company, Inc.
Plastics Division
Dept. MPG-19
Pittsburgh 19, Pennsylvania

- ☐ I am a film extruder
- ☐ I am a film user
- ☐ Send me a sample of SUPER DYLAN film
- ☐ Have a Koppers Representative call

I am interested in the following types of packaging applications .....

Name .....

Firm Address .....

City ..... Zone ... State ...

Announcing:

This is CONDLEX® Film
Extruded by **CONTINENTAL CAN COMPANY**
Flexible Packaging Division
One of the commercial producers of films from SUPER DYLAN

Super Dylan

FILM for PACKAGING

Glass-like clarity—clearer than any other high-density polyethylene film...
Superb printability...Tears without tear tape

Now commercially available! SUPER DYLAN polyethylene film—an all-new packaging material. It has greater clarity than any other high-density polyethylene film.

SUPER DYLAN film is ideal for packaging paper products, baked goods, tobacco products, cereals, knitwear, textiles—soft goods of all types. It's more economical than cellophane!

SUPER DYLAN film is strong and crack-proof. It adds longer shelf life to your products; is unaffected by dry or humid conditions; has excellent low-temperature properties. And, what's more, it tears in a straight line *without* tear tape.

SUPER DYLAN film can be heat-sealed, too. And, it handles easily in bag-making and over-wrapping equipment because it's non-blocking, resists stretching and has sufficient stiffness for push-feeding.

For more information, and a free sample, just fill in and return the coupon.

Koppers also produces these other fine plastics for packaging: DYLITE expandable polystyrene, DYLENE polystyrene and DYLAN polyethylene.

DYLITE, DYLENE, SUPER DYLAN and DYLAN are registered trademarks of Koppers Company, Inc.

KOPPERS

Offices in Principal Cities • In Canada: Dominion Anilines and Chemicals Ltd., Toronto, Ontario

KOPPERS PLASTICS

Koppers Company, Inc.
Plastics Division
Dept. MPG-19
Pittsburgh 19, Pennsylvania

- ☐ I am a film extruder
- ☐ I am a film user
- ☐ Send me a sample of SUPER DYLAN film
- ☐ Have a Koppers Representative call

I am interested in the following types of packaging applications .....

Name .....

Firm Address .....

City ..... Zone ..... State .....

Cut bag-packaging costs in half!

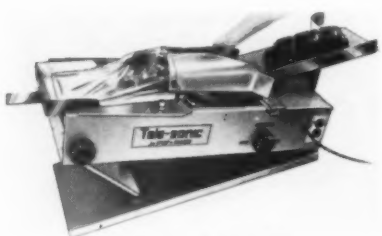
Tele-Sonic
BAGGING MACHINES

U.S. PATENT NO. 2,673,016

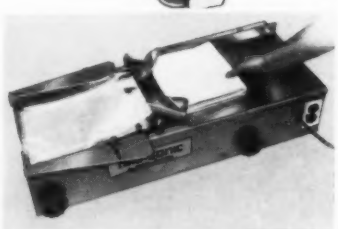
The New FREE-FLOW BAGGER

- Simplified trouble-free, one-girl operation.
- Speeds snug-packing in any bag—paper, polyethylene, cellophane, mylar, etc.
- Flexible—handles different products and bags.
- Adjustable air regulation control to efficiently handle bag opening of any type bag.
- Portable—easily moved to work areas.
- Heavy duty, all metal construction, static reduction.
- Built-in motor and air filter.

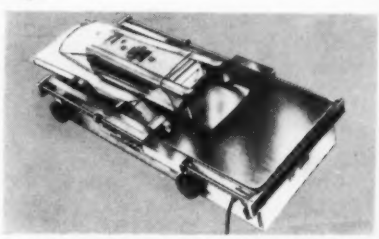
Above photo shows bagging of lollypops.



BAKERY BAGGER



TEXTILE BAGGER



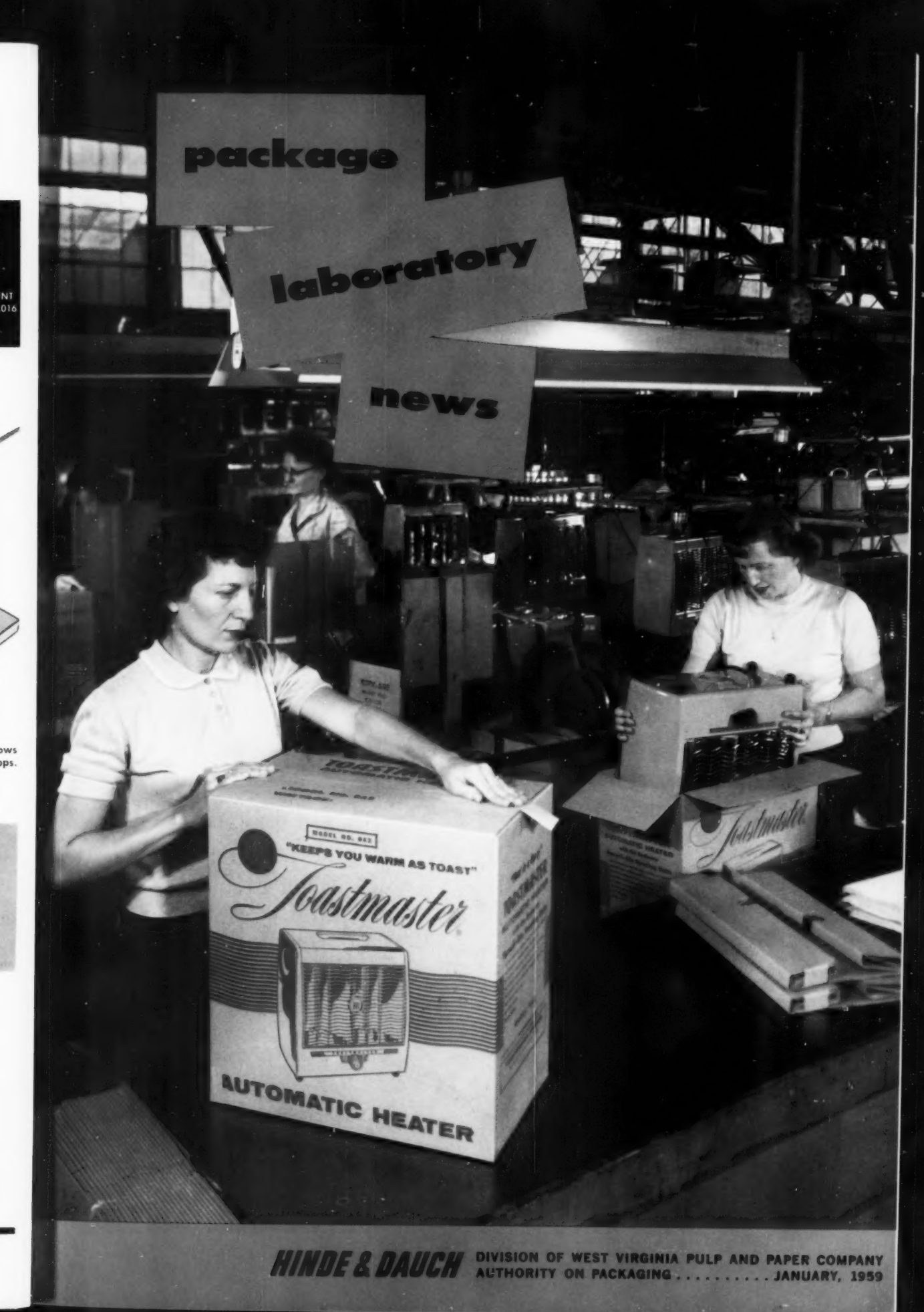
FOR UNWIELDY PRODUCTS

Tele-Sonic Baggers are engineered for your product and your bags and are now serving over 80 different industries.

The new Tele-Sonic Free-Flow Bagger is designed for loose items pre-weighed and required by such industries as confectionery, bakery, dried produce, powders, chemicals, hardware, etc.

Send samples and bags for free engineering report.

Tele-Sonic
packaging corporation
208 West 27th St., New York 1, N. Y.
CHelsea 3-7267
Chicago: 5333 North Lincoln Avenue,
LOng Beach 1-7968

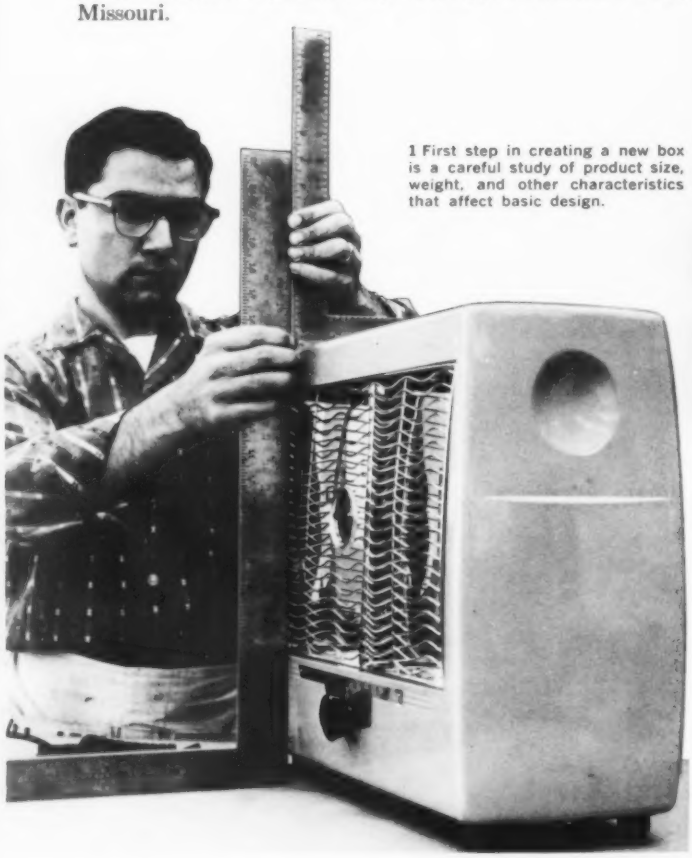


HINDE & DAUCH DIVISION OF WEST VIRGINIA PULP AND PAPER COMPANY
AUTHORITY ON PACKAGING . . . . . JANUARY, 1959

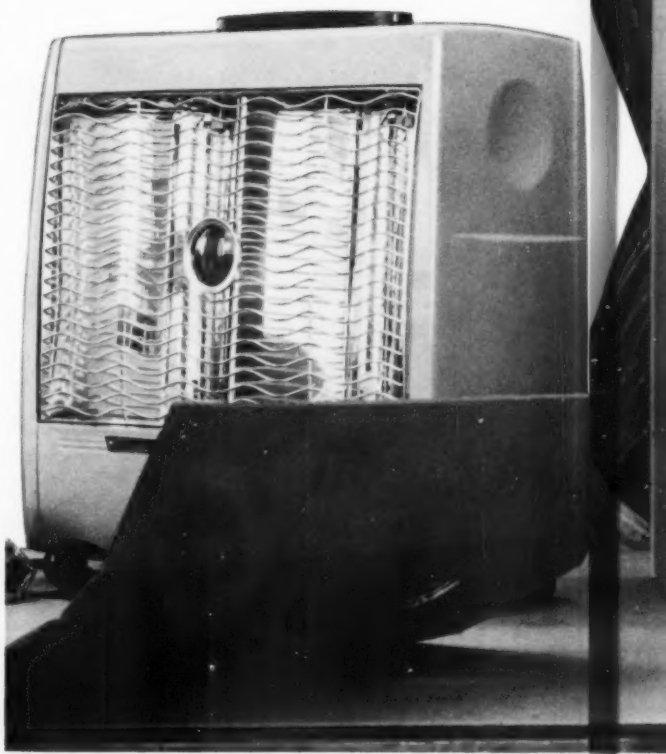
Boxmaking *behind the scenes*

When an H & D customer sets out to produce a new product, he also triggers a complex process in H & D package laboratories—the process of designing a corrugated shipping box to protect and merchandise the projected item. After an initial meeting, where customer and boxmaker decide on requirements, H & D Package Engineers begin building with corrugated—artists make plans for the printing design.

These photos trace this development from talk to truck, illustrating the applied skills of boxmanship. The company: Bersted Division of McGraw-Edison, where Toastmaster heaters are manufactured. A big-volume user of corrugated, McGraw-Edison depends on H & D to supply boxes for plants in Boonville, Kirksville, Moberly, and Jefferson City, Missouri.



1 First step in creating a new box is a careful study of product size, weight, and other characteristics that affect basic design.



3 Next, interior packaging is designed to cushion product from shipping jolts—keep appliance firmly in place during transit.

Package Laboratory News

January, 1959

CIRCULATION 32,876

Published Quarterly by Hinde & Dauch Division of West Virginia Pulp and Paper Company, Sandusky, Ohio

FACTORIES IN: Baltimore Buffalo • Chicago • Cleveland Detroit • Eaton, Ohio • Gastonia, N.C. • Gloucester City, N.J. • Hoboken, N.J. • Kansas City, Kans. • Meriden, Conn. Richmond, Va. • Sandusky, Ohio St. Louis • Watertown, Mass.

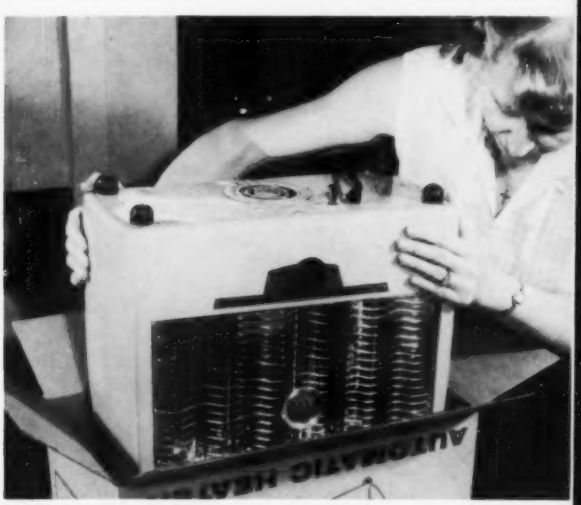
A box that packs quickly is essential to maintaining steady production of Toastmaster appliances at Bersted Manufacturing Division of McGraw-Edison Company. H & D boxes are an important factor in packaging thousands of units daily.

2 H & D Package Engineer forms a pilot box from the proper type of corrugated board, hand-cutting every detail of the sample unit.

4 Testing Lab technician subjects boxed product to a drop test to check on construction of sides, corners and edges.

5 More experiments follow, including the vibration test which simulates shipping by truck or rail.

6 Hinde & Dauch artist renders surface designs for the new box, planning the printing for maximum visual appeal.



7 Product packaging gets under way at McGraw-Edison, with employees quickly learning to assemble and pack this efficient new H & D box.

Corrugated box with built-in protection

Hotpoint ovens travel to kitchens in custom-designed Hinde & Dauch shipping boxes. Interior packing prevents damage, keeps appliances in factory-new shape. Does your product need king-size protection? Better see H & D.

HINDE & DAUCH

Division of West Virginia Pulp and Paper Company

AUTHORITY ON PACKAGING • SANDUSKY, OHIO
15 FACTORIES • 42 SALES OFFICES

...a U.S.A. on 80 lb. Sterling Offset Enamel manufactured by West Virginia Pulp and Paper Company

Wright Solves The Problem . . .

Contract Packager Needed Versatile, Precise Weigher

The Wright Junior Weigher again proved its versatility and accuracy by meeting the Fresh-Pak company's unusual requirements.

Here's the story as told by the customer: "In the course of a day we may package as many as 7 or 8 different items at precise weights varying from 3 oz. to 16 oz. or more. We have found the Jr. Weigher to be efficient in each operation."

FAr Rockaway 7-0698

fresh-pak . . Manufacturing Company

3412 EDGEMERE AVENUE
FAR ROCKAWAY 91, NEW YORK

Contract Packaging

Oct. 18, 1958

Wright Machinery Co.
796 Bergen Blvd.
Ridgefield, N. J.

Att: Mr. I. P. Ritschel

Dear Sir:

We have been operating a Wright Jr. Weigher here at Fresh-Pak for more than 10 months and we find that it satisfactorily lives up to our demands.

Our business provides a unique test for a packaging machine: We are contract packers and handle a variety of nuts, candies (both wrapped and unwrapped), dried beans, etc. We have found the Jr. Weigher to be efficient in each type of operation. In the course of a day, we may package as many as 7 or 8 different items at precise weights, varying from 3 oz. to 16 oz. and more. Therefore, time and ease of "changeover" is a factor of great importance to us. We find that with the Jr. Weigher it takes a minimum of time to adjust for different weights.

Not only have we found it efficient to work with the Wright Jr. Weigher, we have also found the personnel of your company very cooperative. From the men who installed the machine, to the engineer who adjusted it, as well as the sales department, their aim was to see to it that we were well pleased . . . and so we are.

Sincerely yours,

FRESH-PAK MFG. CO.

Jesse Ginsberg

Jesse Ginsberg

jg/b

Fresh-Pak's President Jesse Ginsberg, left, and Wright's Bob Rullo examine one of the Junior Weigher's unique change-over features.

WRIGHT MACHINERY COMPANY
DIVISION OF SPERRY RAND CORPORATION
DURHAM, NORTH CAROLINA

DISTRICT OFFICES: Ridgefield, N. J., LaGrange, Ill., Dallas, Texas, San Francisco, Calif., Durham, N. C.

CANADA: Sperry Gyroscope Ottawa Limited, Ottawa, Ontario, Canada

Wright Machinery Company
Division of Sperry Rand Corporation
Durham, North Carolina

Please send me literature and price-delivery information on your Wright Junior Weigher.

Name_____

Company_____

Address_____

City_____ State_____

Our Products_____

ARE YOU PRODUCING ALL THESE JOBS IN ONE OPERATION?
Just one operation completes any kind of tag—merchandise, shipping, manifold—with any kind of tag material right up to .050 board—when you use one New Era Press operated by just one pressman.
Most Profitable Way to Produce
TAGS
LABELS
FORMS
NEW ERA WEB PRESS
This High Gloss Multi-
TAG WAS Wired ON A
Wiring Machine
AT A SPEED UP TO
6000 per hour
SEND FOR BULLETIN #18
CLOTH LABELS
TAGS
ULTRA
LOOK AT EACH SHEET
CONTINUOUS FORMS AND
Service Charges to be paid by Consignee
COLLECT
THIS TAG MANUFACTURED IN ONE OPERATION ON NEW ERA LETTERPRESS
TO TAG SATISFACTION
GRAEBER
WHIRLWIND
185
STRINGER & KNOTTER
Produced at Lowest Costs
You can complete in one operation any type of label, using any type of label stock including heat seal, pressure sensitive and other materials—with one New Era Press at speeds up to 7,500 impressions per hour. Finished product is delivered either cut off, rewound or folded.
Completed in Any Size
Why pass up or farm out short-run orders of 5,000 to 30,000 sets for any size snap-outs and continuous forms when one New Era Press does the jobs profitably with minimum changeover and downtime. There is no limit to size of forms as with a rotary press.
FROM PAPER ROLL TO COMPLETED PRODUCT IN ONE HIGH-SPEED OPERATION
That's the New Era Press! It prints any number of colors on one or both sides of the web at the same time, die-cuts any shape or size, slits, punches, perforates, numbers and delivers the finished job—either cut off, rewound or folded—at the end of one run by one pressman. The New Era Bulletin also shows how the New Era Press handles bag headers, tickets, specialties. Write on your company letterhead now for your free copy of the New Era Bulletin.
SEE GRAPHIC ARTS IN ACTION
7th EDUCATIONAL
Graphic Arts
EXPOSITION
NEW YORK COLISEUM · SEPT. 6-12, 1959
New Era Booth 147
NEW ERA
Also produces
Bag Headers, Specialties,
Tickets, many other products
MANUFACTURING CO., DEPT. MP, BOX #400, HAWTHORNE, NEW JERSEY
Manufacturer of the finest printing presses for more than 59 years

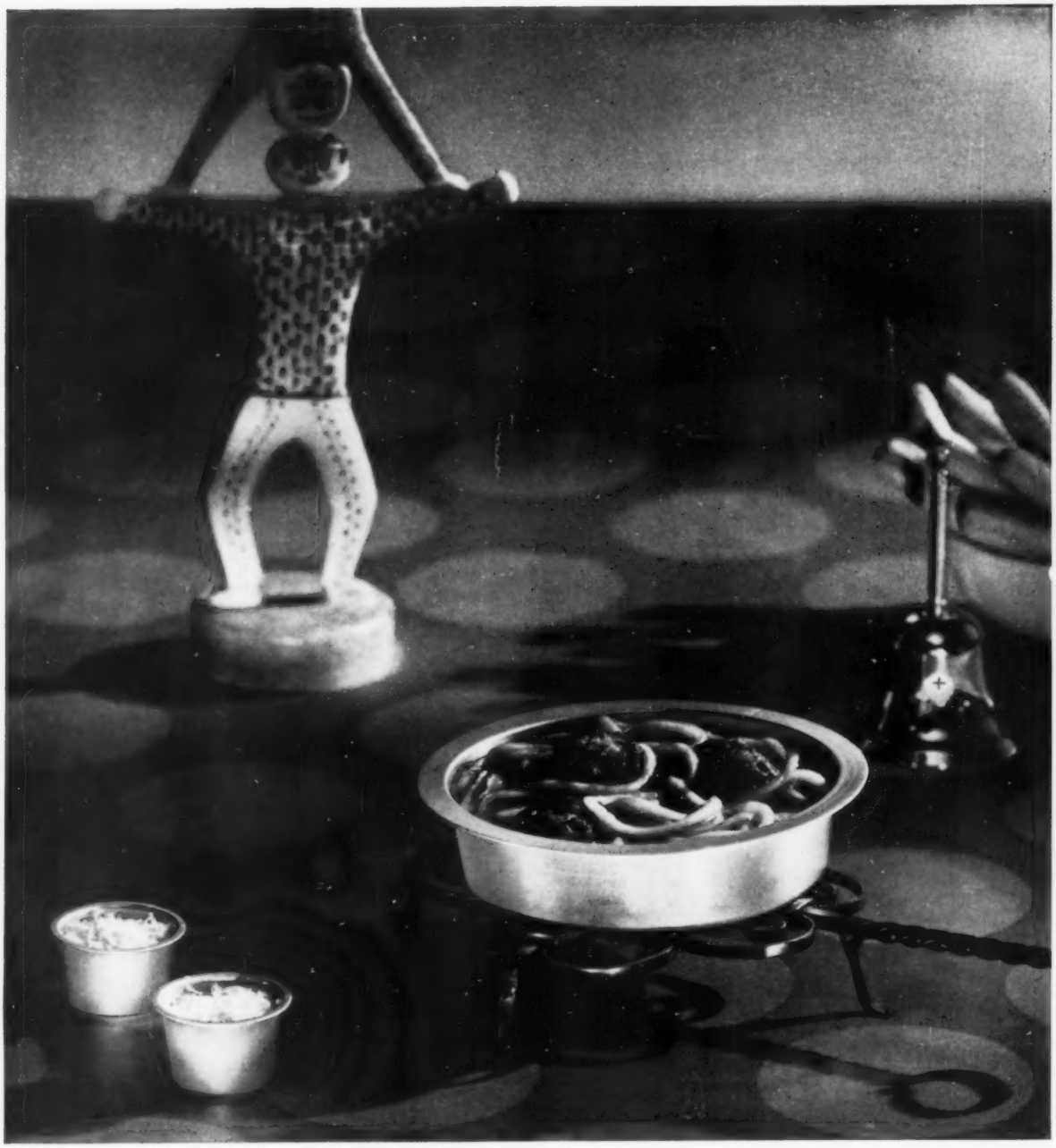
THIS IS THE HOERNER SPECIALIST FOR PACKAGING ROUND THINGS

Keeping round things from rolling around inside square boxes is a Hoerner specialty. Through clever use of punched, die-cut, rolled, folded, taped or stapled corrugated board, Hoerner experts keep the roundest objects well protected during shipping. If you manufacture round things, and shipping costs or damages are getting away from you, contact the nearest Hoerner office or plant.

HOERNER BOXES, INC.

Corrugated specialists for Mid-America

GENERAL OFFICES—*600 Morgan St., Keokuk, Iowa* • **PLANTS**—*Keokuk, Des Moines and Ottumwa, Iowa Sand Springs, Oklahoma • Minneapolis, Minnesota • Fort Worth, Texas • Sioux Falls, South Dakota Fort Smith and Little Rock, Arkansas • Cajas y Empaques Impermeables, S. A., Mexico City D. F., Mexico*



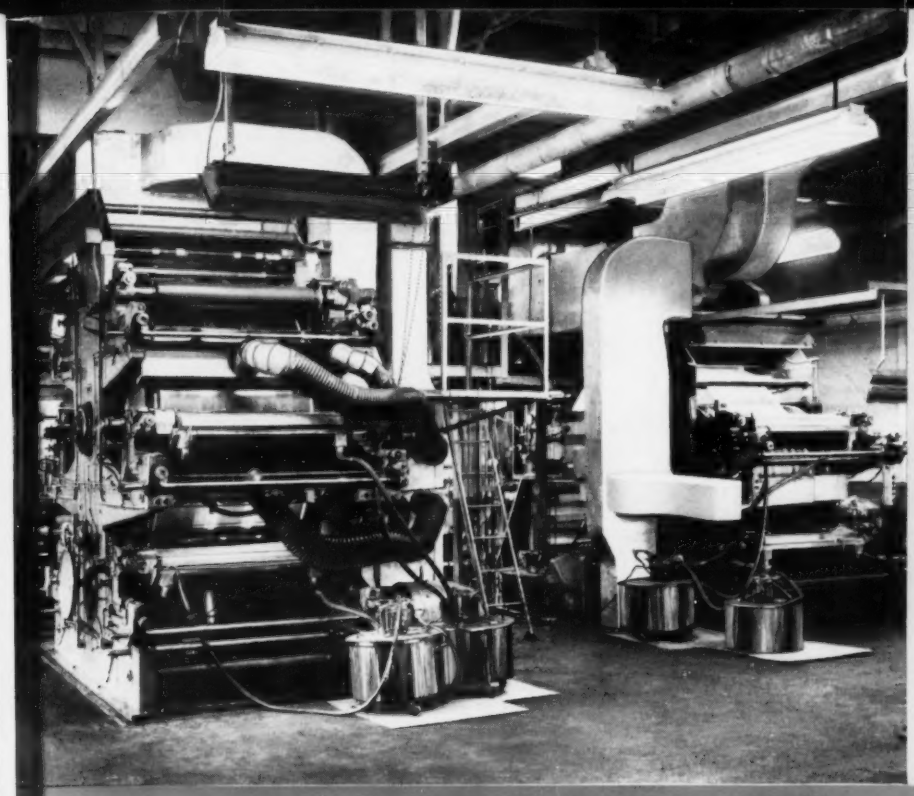
The Plus Container

Lighthearted Lunch . . . Your product says convenience—no fixin', no mixin'—when it's packed in this newest of rigid aluminum foil containers . . . . For individual service or family meals, a foil container offers the sales appeal of heat-and-serve convenience. It's table-wise and cleanup free . . . . We've created more containers than any other manufacturer. This wealth of experience is available to you. Send us an outline of your package requirements. We'll show you the advantages of rigid aluminum foil.

EKCO-ALCOA CONTAINERS INC.

WHEELING, ILLINOIS • WHITTIER, CALIFORNIA • LONG ISLAND CITY, NEW YORK

EKCO is the registered trademark of Ekco Products Company, ALCOA is the registered trademark of Aluminum Company of America. The corporate name and combination mark, EKCO-ALCOA, is used under license to the manufacturer by each of these companies.



"At Continental Can Company, we take great pride in the quality of our printing on flexible materials and firmly believe our finest results are obtained on Hudson Sharp single impression cylinder presses.

"Multi-color designs and increased demands for process screen printing with true reproduction fidelity on polyethylene and other extensible materials for use in automatic packaging makes it doubly important that color register be accurate and print repeats precise.

"Hudson Sharp presses give us such performance and many other advantages. Their heavy construction and many important operating features permit 'round-the-clock' production, faster print speeds, uniform web control and minimum downtime for job change-over . . . all of which add up to higher quality printing at greater economies than heretofore obtained."

Jack C. Beck

Jack C. Beck, Plant Mgr.
Flexible Packaging Division
Continental Can Company, Inc.
Newark, Ohio

For precise color reproduction on flexible materials *Continental Can Company* relies on HUDSON-SHARP *Single Impression Cylinder* FLEXO-PRESSES

Continental Can specifies H-S Presses for their Flexible Packaging Division*

Look no further to find better flexographic presses for top quality printing on extensible packaging materials than those you see here in the Newark, Ohio plant of Continental Can Company's Flexible Packaging Division. These presses are running 24 hours a day printing intricate line and halftone screen multi-color designs on such materials as Cellophane, Pliofilm, Polyethylene, etc. Holding color impressions and print repeats in accurate register over long runs is just one of the many outstanding advantages these presses offer. Other paramount features that contribute to high operating efficiency and quality printing include:—

- High speed printing *with a minimum of material waste!*
- Standard presses — with two to six color stations
- Print widths 20" to 60" — repeats 12" to 36"
- Agitated splash-proof ink fountains
- Hydraulic color throw-outs
- Print ½ mil. film to heavy-weight type papers
- Anilox type transfer rolls
- Automatic web tension controls
- Accurate print register — constant print design repeats
- Handles unevenly wound rolls or webs of varying caliper
- High speed surface dryers between colors and before rewind
- Flying splice unwind and rewind (optional)
- Vibrationless, heavy-duty cast iron construction
- Anti-friction bearings thru-out
- Easiest of all presses to operate — holds positive register through all speed changes

WRITE FOR FREE DESCRIPTIVE BROCHURE

Putting Ideas to Work

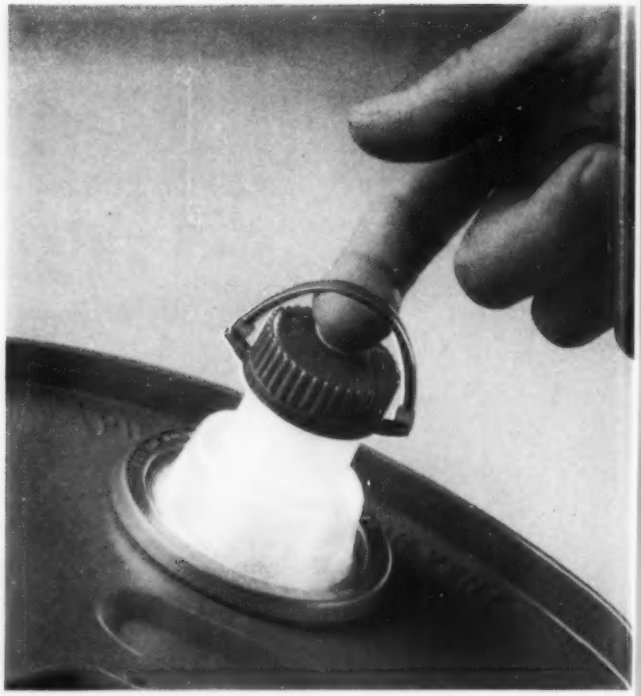
FOOD MACHINERY AND CHEMICAL CORPORATION
FMC Packaging Machinery Division
Hudson-Sharp Machine Company
1201 MAIN STREET, GREEN BAY, WISCONSIN

Gives complete operational data and specifications on these highly popular and productive flexographic presses. On your company letterhead, please.

*FORMERLY SHELLMAR-BETNER

HEAT AND SERVE DINNER in pouch of MYLAR® polyester film coated with ALATHON 16 has heat seal that stands up under temperature extremes. ALATHON resists oils, greases, acids and alkalies. (Coating by Flexible Packaging Div. of Continental Can Co., Mt. Vernon, Ohio, and Standard Packaging Corp., Clifton, New Jersey, for John Morrell Co., Chicago, Illinois.)

WALLPAPER PASTE is packaged in bag coated with ALATHON 16. A special patent-applied-for process makes the ALATHON gluable at commercial speeds with conventional, low-cost dextrine adhesives. Coating of ALATHON insures moisture-resistance, even at folds, keeps flour from lumping or caking. (Package for Lepage's, Gloucester, Massachusetts, coated by Lowe Paper Company, Ridgefield, New Jersey.)



FLEXSPOUT CLOSURE for commercial pails has spout and removable diaphragm of ALATHON. Excellent chemical resistance of ALATHON withstands effects of packaged liquids, yet cannot harm products because it is odorless, tasteless and non-toxic. Pouring is easier and more efficient. (Manufactured by Rieke Metal Products Corporation, Auburn, Indiana.)

For a low-cost, sa
specify a

PACKAGING SHIRTS with sparkling film of ALATHON 23A saves laundry $375 a week in material and labor costs over previous packaging method. Customers prefer durable ALATHON for outstanding protection and numerous re-use advantages. (Packaging machine and film by Mehl Mfg. Company, Cincinnati, Ohio, for Adelman Laundry Company, Milwaukee, Wisconsin.)

MODERN, TAMPERPROOF milk container coated inside and out with ALATHON 16 eliminates problem of leakage. The odorless, tasteless coating of the disposable container can't flake off and float in the milk as ordinary coatings sometimes do. (Coating and container by Sealright Co., Inc., Div. Sealright—Oswego Falls Corp., Fulton, New York.)

st, sales-appealing package

fy a Du Pont ALATHON® polyethylene resin

Since packaging plays such an important role in the impression your product creates, it pays to begin with the finest packaging material available . . . Du Pont ALATHON polyethylene resin.

Du Pont has developed an entire family of ALATHON polyethylene resins, each one with a particular property or combination of properties which make it outstanding for a specific application. Thus there is an ALATHON tailored expressly for your packaging need.

For additional information and assistance in selecting the proper ALATHON for your needs, fill in and mail the coupon below.

POLYCHEMICALS DEPARTMENT

DU PONT
REG. U. S. PAT. OFF.

BETTER THINGS FOR BETTER LIVING
... THROUGH CHEMISTRY

E. I. du Pont de Nemours & Co. (Inc.), Polychemicals Dept.
Room A-28-1, Du Pont Building, Wilmington 98, Delaware

Please send me additional property and application data on Du Pont ALATHON polyethylene resins.

Name _____

Company _____ *Position* _____

Street _____

City _____ *State* _____

In Canada: Du Pont of Canada Limited, P. O. Box 660, Montreal, Quebec.

STAINLESS STEEL
ENGRAVED CYLINDERS

More and more packaging men are discovering that Steel Engraved Cylinders give them the printed package they are looking for. Converters are impressed with the way they out-last all other printing techniques and the fact that every impression is as perfect as the first—even after 3 or 4 years of continuous use! Moreover when printing critical materials you can be confident of perfect results with chromeplated steel.

Make your next impression a permanent one—make it a steel engraved cylinder by Vitra-Tone. Write today for prices and details.

Faultless 4-color registration at speeds up to 800 impressions a minute.

Cylinders in any size up to 36" long.

Patterned glue rollers that create extremely strong gripping surfaces.

VITRA-TONE ENGRAVING CORPORATION

345 BERGEN STREET; BROOKLYN 17, N. Y. • ULSTER 8-5712

Background for Packaging

Keen interest is being shown by oil companies in a German process for making round, liquid-tight bottles from plastic sheet. Using low-cost, oil-resistant, PVC sheet, transparent quart bottles for motor oil might be cheaper than cans. Sheet is fed from a roll, blanked, doubled over, softened by heat and then blown to desired shape, while two narrow fin edges are electronically sealed. Trademarks and lettering can be molded in. Convolute rings add strength. For single use, such as for oil, bottle needs no closure except heat seal at top of constricted neck; for reclosure uses, interior threads can be provided. American licensee will be announced soon.

Notes, quotes and comments

Big year ahead, but with profits restricted, is prospect for paper and paperboard industry. It is expected that for the full year just ended, with big comeback in last half, production will approximate the 30.7 million tons of 1957. But even with 32 to 32½ million tons forecast for 1959, industry will be operating well below its current 37-million-ton capacity, which is bound to have a restraining influence on prices and profits.

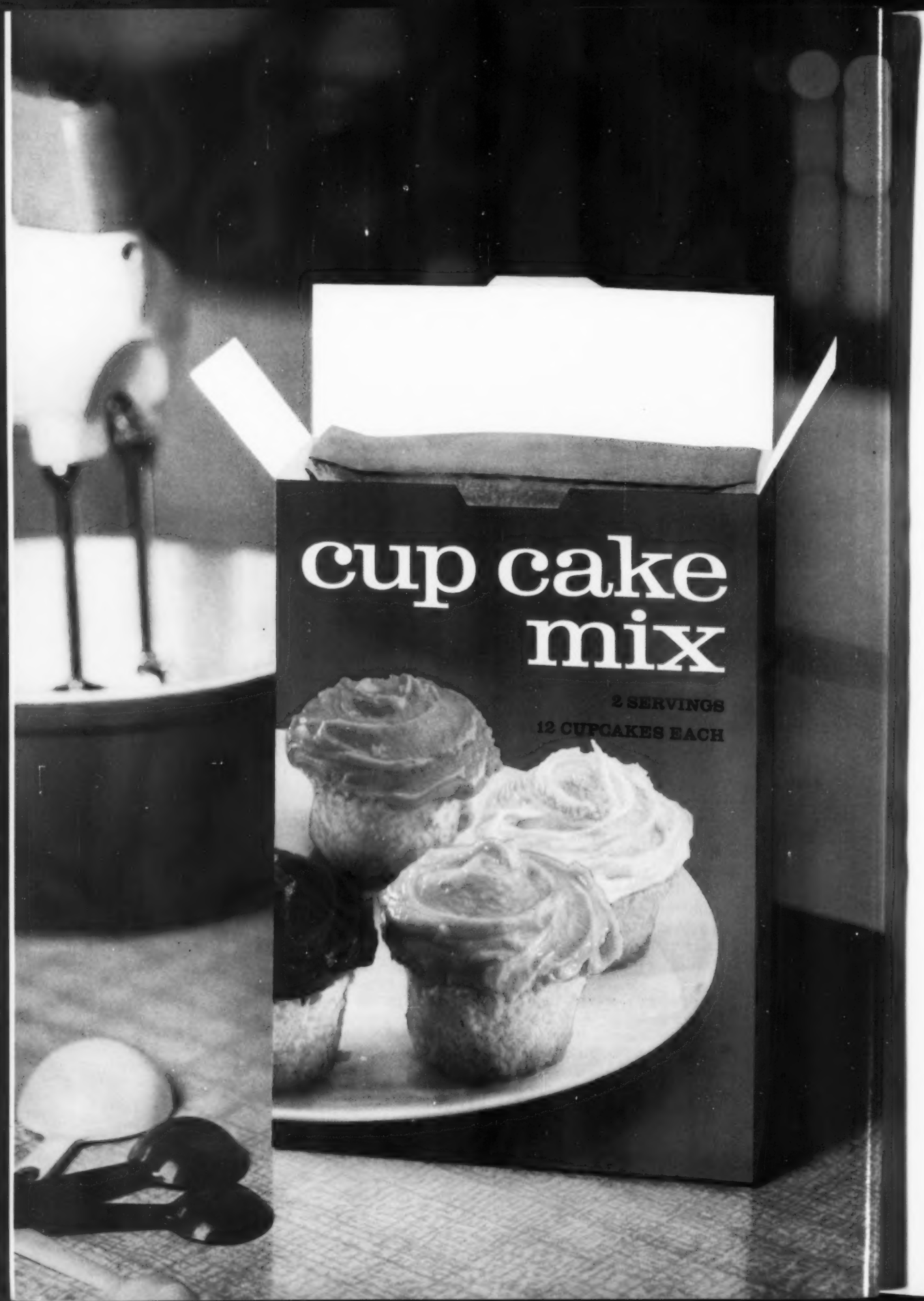
Which way to move in foil-container market is question troubling aluminum producers. One company has developed an in-plant machine by which foil-pan users can speedily set up their own pans from roll stock—but hesitates to introduce it because of impact on converter customers. Another question: Are food processors ready for truly high-speed foil-container feeding and lidding machinery? One unit rated at 200 per minute has been demonstrated—but few packagers are as yet using foil containers in such volume. In another area, drawn-foil cups are coming which will compete with paper in cost and run on same lines.

A new principle of pressure dispensing long discussed for aerosols is making its appearance in bottler's tanks from which carbonated beverages are filled. An over-size plastic bag, disposable after each use, lines the tank, is sealed at top by the tank cover and then is subjected to counter pressure between the tank walls and the bag. This assures even filling of the liquid into bottles or cans with no loss of carbonation, since propulsion comes from pressure on the bag rather than from carbonation itself. Same principle, if applied to aerosol cans, could completely separate propellant from product and avoid loss of propellant.

Tear-tape shippers, increasingly used by packagers, have a new booster in the Jewel Tea Co., which will now place full cases on its store shelves for all items having a turnover of one and one-half or more cases per week. Merchandise for this Midwestern chain will be packed in two tiers so it can be displayed in the bottom tray of the original corrugated shipping container, created by tearing the tape around the sides.

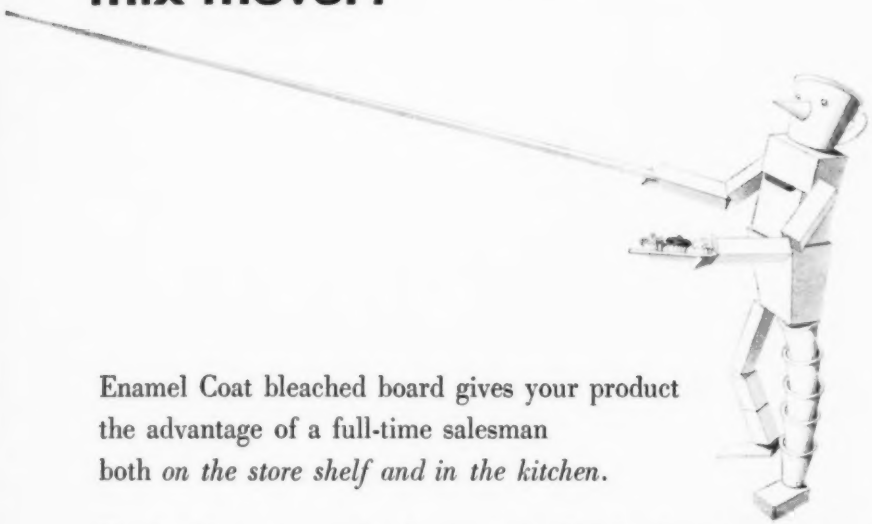
Neglected markets: Have brewers thought of the opportunity of selling six-pack carry-homes in taverns? Laws in more than half of the states would permit this. Many taverns, where permitted, sell liquors bottled as well as by-the-drink, but few, if any, are promoting beer in the same way. Yet how logical it would be for the bartender to suggest to the beer drinker, settling his tab, that he might like to take home a six-can pack or two. This would take education and promotion, but it could pay off in sales of millions of extra cans.

Advertising value of the package itself was strikingly highlighted in address by *Stephen M. Barker* of Continental Can Co. to 500 home economists at recent United Fruit forum. He dis- [*Continued on page 40*]


cup cake
mix
2 SERVINGS
12 CUPCAKES EACH

BRITE-PAK ENAMEL COAT

mix mover!



Enamel Coat bleached board gives your product
the advantage of a full-time salesman
both *on the store shelf and in the kitchen.*

Here's where competition's toughest. Here's where package appearance pays off.

Brite-Pak Enamel Coat actually helps sell goods — it's that *outstanding!*

Your own eyes will show you why. Enamel coat's gleaming surface
takes full color process printing — words and pictures —
so brilliantly that ordinary cartons look old-fashioned!

A Brite-Pak carton first sells your product and then,
in use, invites re-purchase . . . because Brite-Pak is
clean, white and sanitary on both sides and all the way through.

What's more, Brite-Pak is economical!

Write or call for full information.

WEST VIRGINIA PULP AND PAPER COMPANY

Bleached Board Division 230 Park Avenue, New York 17

played a cookie package having about the same copy area as a *Life-size* page ad. Average family, he said, sends at least one delegate to the grocery store 2½ times a week, or 130 times a year. For all families, that's a total of 6½ billion trips per year. If a package, he concluded, is in only 75% of the stores, it has an annual "reading exposure" of 4,875,000,000—which is many times the number of annual exposures in the biggest national weekly magazines—at *no space cost whatever.*

Good news to U. S. packaging-machinery builders is announcement that, for the first time since World War II, bars are down to unrestricted import of all types of American packaging machinery into Great Britain. Previously, any British company wishing to import a machine from the dollar area had to have a license, which was granted only if the Board of Trade was satisfied that a comparable machine could not be obtained for sterling or "soft" currency. Result: Any American machine that proved itself in Britain was promptly imitated within the sterling area and lost its market. But imports in the packaging-machinery category must still pay 15 to 17½% duty.

Background for packaging

Convenience ideas are sometimes just too obvious to be recognized. *Example:* After all the to-do about opening metal-end fibre cans of frozen foods, with most producers favoring the use of a knife to slice off the end, *Sefton Fibre Can Co.* comes up with the simple idea of using the rounded end of a beer-can opener (the same end that is used to remove crown caps) to pry off the metal end, avoiding all risk of accidents and spillage. It works. What other simplified methods of package opening are being neglected?

How important is Fido as a consumer of packaged goods? According to *Food Topics*, the owners of America's 75 million household pets (dogs, cats, parakeets, etc.) last year spent close to $350 million in the nation's food stores. Seven sales out of 10 went to the food supermarket and 95 sales out of 100 were in multiple units. The present volume compares with $282 million in 1955.

[*Continued from page 37*]

New evidence of the importance of advertising pre-sell tied in with memorable package design is found in a survey of consumer buying habits by *Nesbitt Associates*. Of the 278 consumers, out of 304 interviewed, who could positively name instances where they had tried a new product or brand recently, 69 said they definitely recognized the package in the store after having seen it in advertisements or on TV and that such recognition led to purchase.

Potent remarks by *Robert Zeidman* at the Packaging Competition Awards Dinner of *Variety Store Merchandiser:* "How many of us would have guessed, back in 1946, that today one-half of all drug sales would be made on a self-service basis; that 9% of our food stores would account for 62% of sales; that clothing and garden supplies would be sold in supermarket and variety stores? . . . The technical breakthrough in new packaging materials, methods and processes has become very evident . . . We are starting to see some of the new automated systems of packaging in aluminum foils and formed plastics which open up new, wide horizons . . ."

Pointed criticism of bakery packaging was voiced at recent Bakery Packaging Council breakfast by *Charles Harper*, manager, store planning and display, Sears, Roebuck: Packaging and display get little attention in bakery business publications, even less from bakers. Bakery packaging is unimaginative. There is too much "me too"—tending to gingham or plaid wrappers in red, white, blue or yellow. Colors often fight the merchandise instead of complementing it. Little consideration is given to supermarket lighting. Brown-and-serve products are particularly unappetizing, being mere "blobs of dough." Corridor discussion agreed with Mr. Harper's suggestion that there should be closer liaison between supermarket chains, bakers and packaging experts.

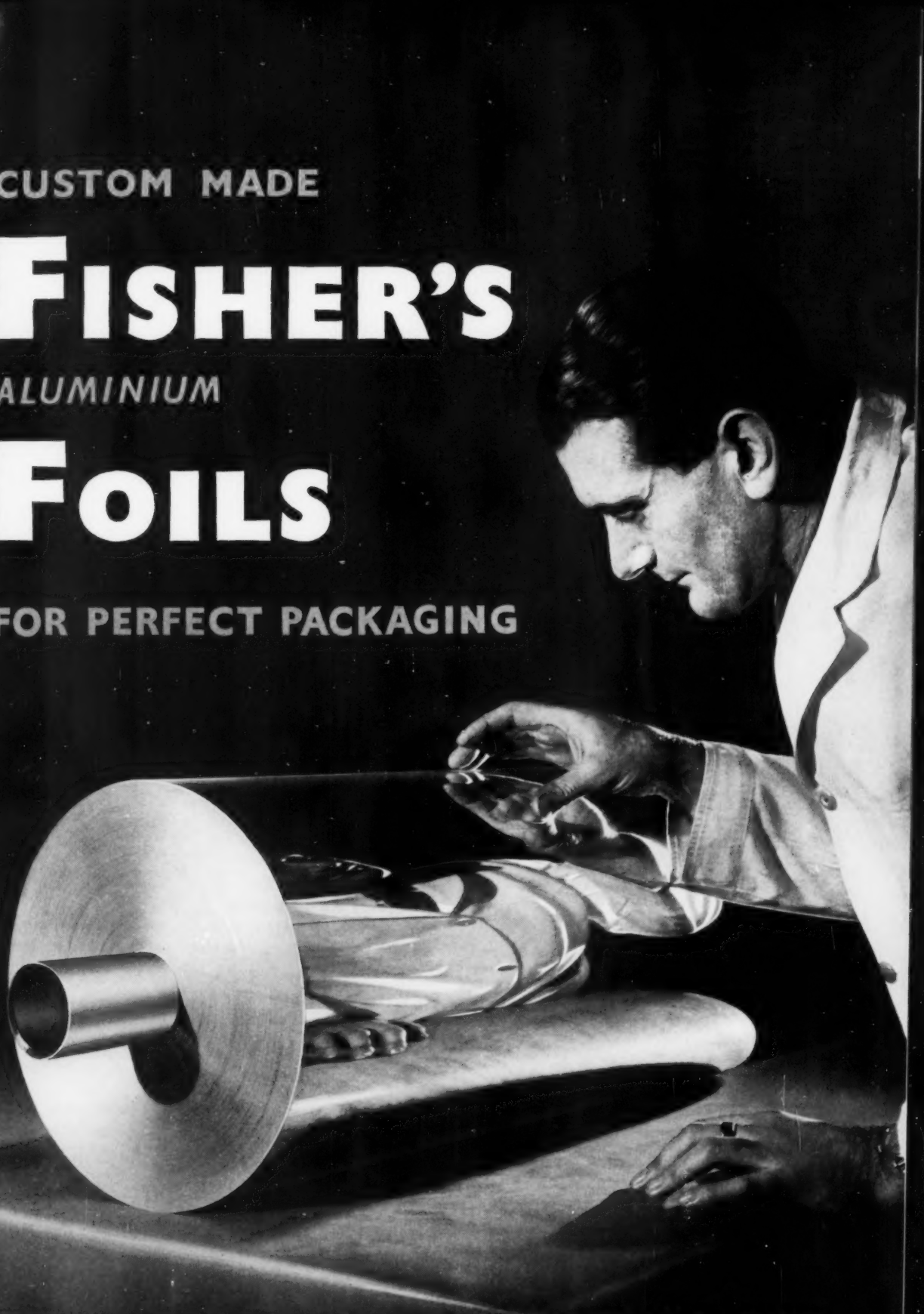
CUSTOM MADE

FISHER'S

ALUMINIUM

FOILS

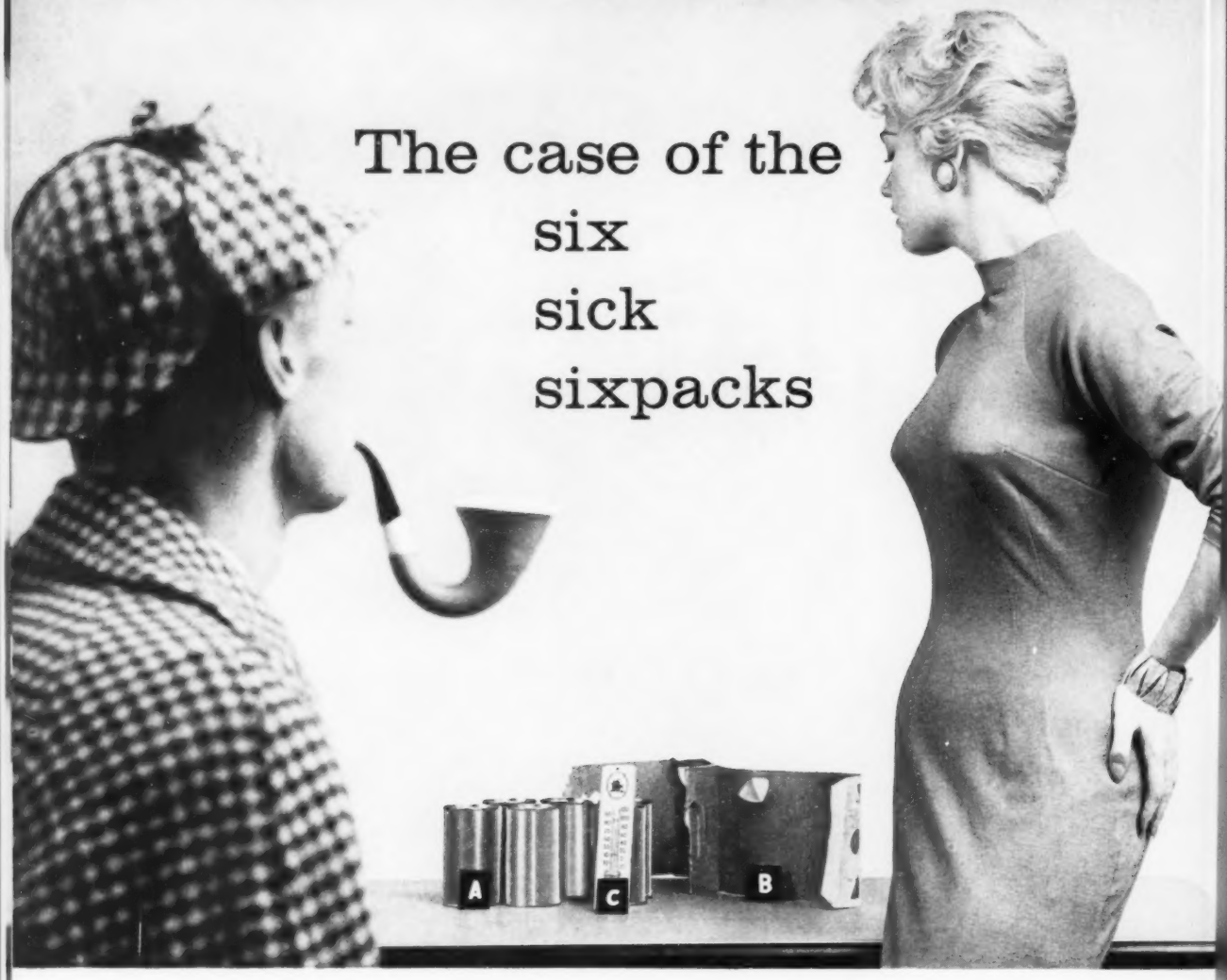
FOR PERFECT PACKAGING



FISHER'S FOILS LIMITED, EXHIBITION GROUNDS, WEMBLEY, MIDDLESEX, ENGLAND

Tel: Wembley 6011 *Cables and Grams: Liofnit, Wembley (A.B.C. Code 6th Edition)*

The case of the six sick sixpacks



FEARLESS FULLER: Miss Watson, do you know what a perfect 36 is?

MISS WATSON: Oh, Fearless, you've been peeking at my sweater size.

FEARLESS FULLER: Come now, Miss Watson, let's keep our minds on business. When I say perfect 36 I mean six sixpacks of beer.

MISS WATSON: Hmmmmmmmm.

FEARLESS FULLER: My most recent case involved an imperfect 36.

MISS WATSON: An imperfect 36?

FEARLESS FULLER: Yes, note the cans of beer on the table, and the tattered six-pack cartons that once held them.

MISS WATSON: Someone must have been awful thirsty, to tear those cartons apart like that just to get a beer.

FEARLESS FULLER: Not at all, Miss Watson. The fact is that the adhesive sealing the six-pack bottoms was not Fuller's and gave way and spilled the beer cans on to the floor.

MISS WATSON: Was that because the cans contained what some people call a heavy beer?

FEARLESS FULLER: Please, Miss Watson. Let me call your attention to the thermometer. Exhibit C.

MISS WATSON: What's that got to do with it?

FEARLESS FULLER: Well, as you know, beer is subject to varying temperature and humidity conditions. From warehouse to truck to shelf to cooler and maybe back to shelf again.

MISS WATSON: And?

FEARLESS FULLER: These changing humidity and temperature conditions weakened the adhesive bond, causing the cartons to break, spilling the cans of beer.

MISS WATSON: What was the right solution to the Six Sick Sixpacks case, Fearless?

FEARLESS FULLER: I recommended switching to Fuller's Adhesive #504. Now the case, or should I say cases, are permanently closed.

MISS WATSON: You're amazing, Fearless.

FEARLESS FULLER: Elementary, my dear Miss Watson. A Fuller man always knows the correct solution for adhesive problems.

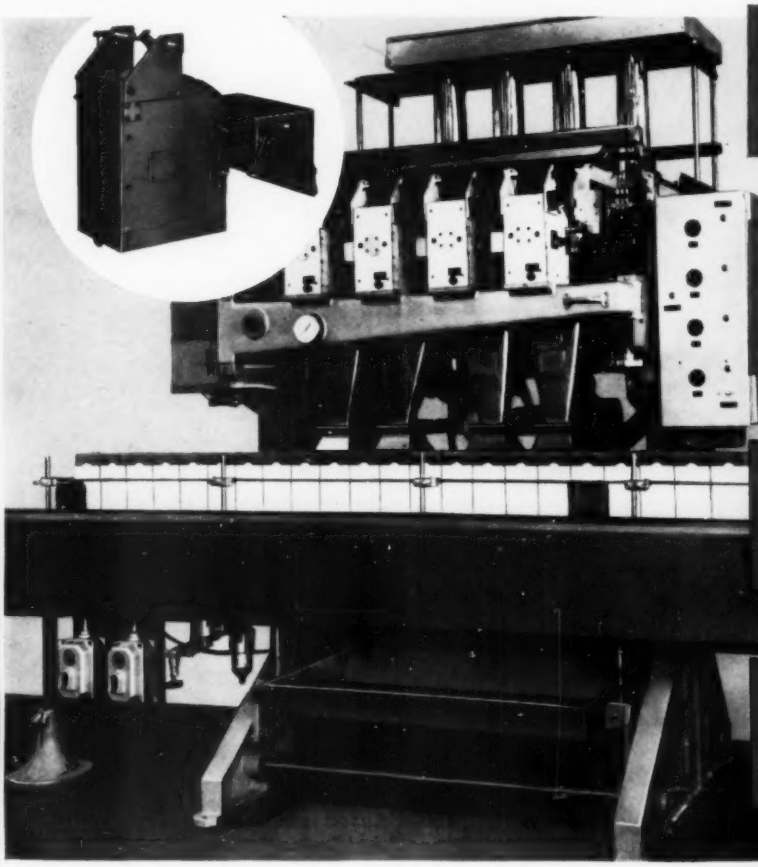
Your Fuller man is ready with the correct solutions on any adhesive problems for you, too. Contact your nearby plant.

H.B. Fuller Co.

255 Eagle Street, St. Paul 2, Minn.

ST. PAUL, MINN. • ATLANTA, GA. • BUFFALO, N.Y. • CHICAGO, ILL.
CINCINNATI, OHIO • DALLAS, TEX. • KANSAS CITY, MO.
LINDEN, N. J. • LOS ANGELES, CALIF. • MEMPHIS, TENN.
PORTLAND, ORE. • SO. SAN FRANCISCO, CALIF. • TAMPA, FLA.

THERE'S NO WEIGH LIKE PNEUMATRON!



Net weight accuracy never before attainable

High speed air circuit action

Extremely responsive to changes in product density and feeding rate

Weighing assembly travels only minute distance - .020"

Practical approach to instantaneous pressure weighing

Sensitive, yet durable, continual operation without change in accuracy

No weighing method ever devised offers the combination of speed, accuracy and dependability that is inherent in the revolutionary PNEUMATRON design. It establishes new standards of precision in net weighing. Available in two, four and six head models. Each head consists of a sensitive cantilever assembly and air control device for accurately detecting the deflected position of its receptacle as goods are filled.

Write for Bulletin #122 giving complete information.

PNEUMATIC SCALE CORP., LTD., 82 Newport Ave., Quincy 71, Mass. *Also: New York; Chicago; Dallas; San Francisco; Los Angeles; Seattle; Leeds, England.* Canadian Division: *Delamere & Williams Company, Ltd., Toronto.*

★PNEUMATIC

Packaging and Bottling Equipment

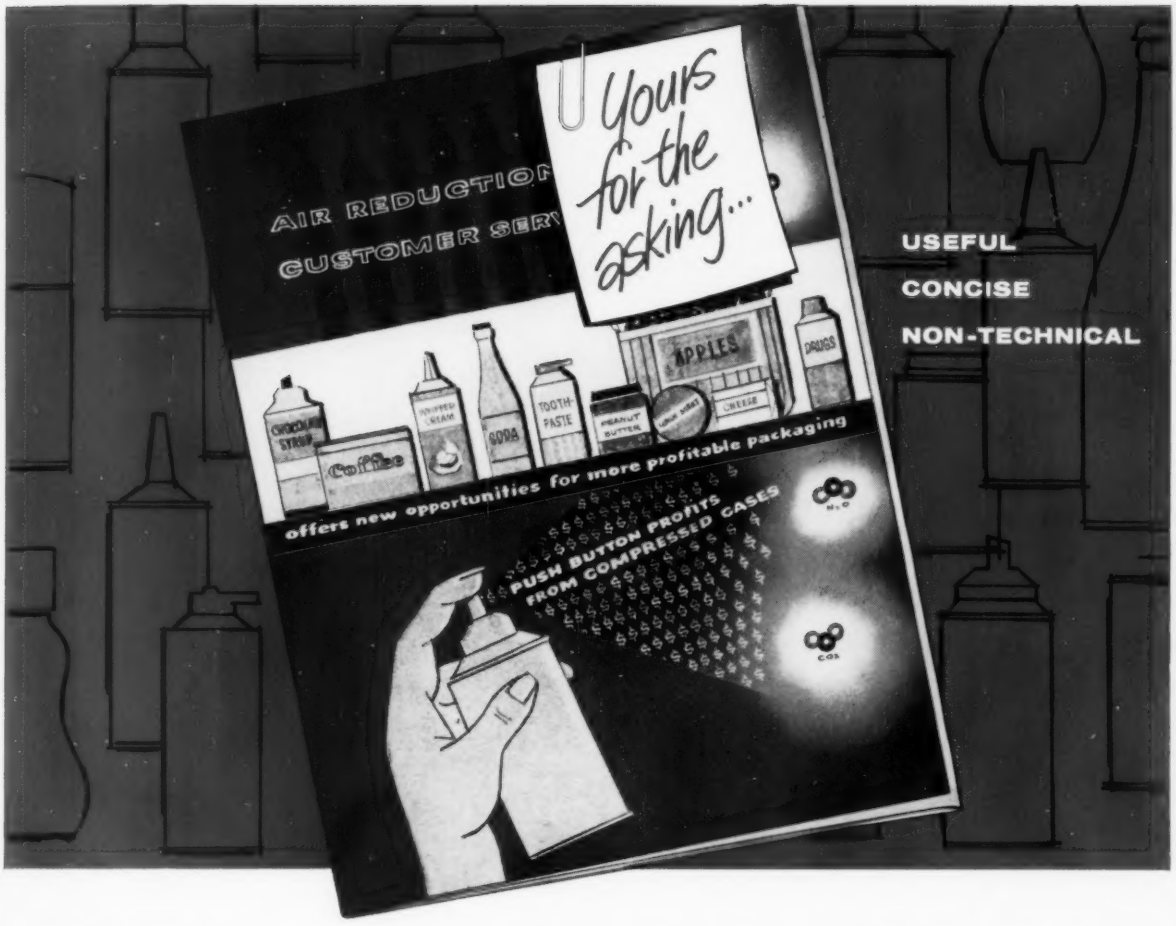
Youngstown tin plate

will help feed the families of her day

Automized, round-the-clock canning of foodstuffs in *her* day will feed more families than the world has ever known. Youngstown, today, is anticipating tomorrow's need for tin plate —in increasing quantity and quality. Continuing advancements in facilities, the result of tin plate research, make certain that millions of families in *her* day will enjoy the finest of food... *packaged in Youngstown tin plate.*

THE
YOUNGSTOWN
SHEET AND TUBE COMPANY

Manufacturers of Carbon, Alloy and Yoloy Steel
Youngstown, Ohio



valuable information for profit-minded packagers

ALSO AVAILABLE . . .

"FACTS ON GASES USED FOR FOOD PRODUCTS" covers in detail the aspects of processing, preserving and packaging food products and how the use of the proper compressed gas improves product appearance and shelf life.

Just out — Air Reduction's helpful new brochure, "NEW OPPORTUNITIES FOR MORE PROFITABLE PACKAGING," explains how AIR REDUCTION representatives — both in the field and in the laboratory — work to solve packaging and processing problems involving the use of compressed gases. It shows how both present and prospective users of "push-button" containers will benefit from Air Reduction's extensive experience in this exciting field. The brochure also covers other applications for compressed gases such as blanketing, purging, quick freezing, chilling, hydrogenation and carbonation.

If you package or process a product — send today for your free copy!

AIRCO

AIR REDUCTION COMPANY, INC.

Customer Service Packaging Laboratory

1400 East Washington Avenue
Madison 10, Wisconsin

AIR REDUCTION COMPANY, INCORPORATED
CUSTOMER SERVICE PACKAGING LABORATORY
1400 East Washington Avenue, Madison 10, Wisconsin

Please send, without obligation, the material requested below:

☐ "NEW OPPORTUNITIES FOR MORE PROFITABLE PACKAGING"
☐ "FACTS ON GASES USED FOR FOOD PRODUCTS"

(Please print or type)

Name.....
Title.....
Company.....
Address.....
City.....Zone.....State.....

Film makers, bag makers, bag users can now have the same kind of high-impact strength film that beat 5-ply kraft shipping bags in this "toss test." The answer: "Poly-Eth" 2200 series resins (see below).

Which of The 8 "Poly-Eth" High-Impact Resins Can Solve Your Particular Problem?

Spencer's 2200 series film resins are tailor-made for produce bags, industrial packages:

Created to meet rigid requirements of film for produce bags, drum liners and industrial packaging, these Spencer "Poly-Eth" film grade resins offer a wide variety of advantages:

(1) Surface toughness for high impact strength.

(2) Flexibility, even at low temperatures, makes them ideal for cold storage applications.

(3) Ease of extrusion—2200 series resins easily draw down to one mil. But that's not all!

Easy to heat seal, film made of "Poly-Eth" 2200 film grade resins provides a perfect "sift-proof" closure for bags. Ideal for use with automatic bag making machines and automatic packaging equipment, these films respond well to all conventional methods for improving printability.

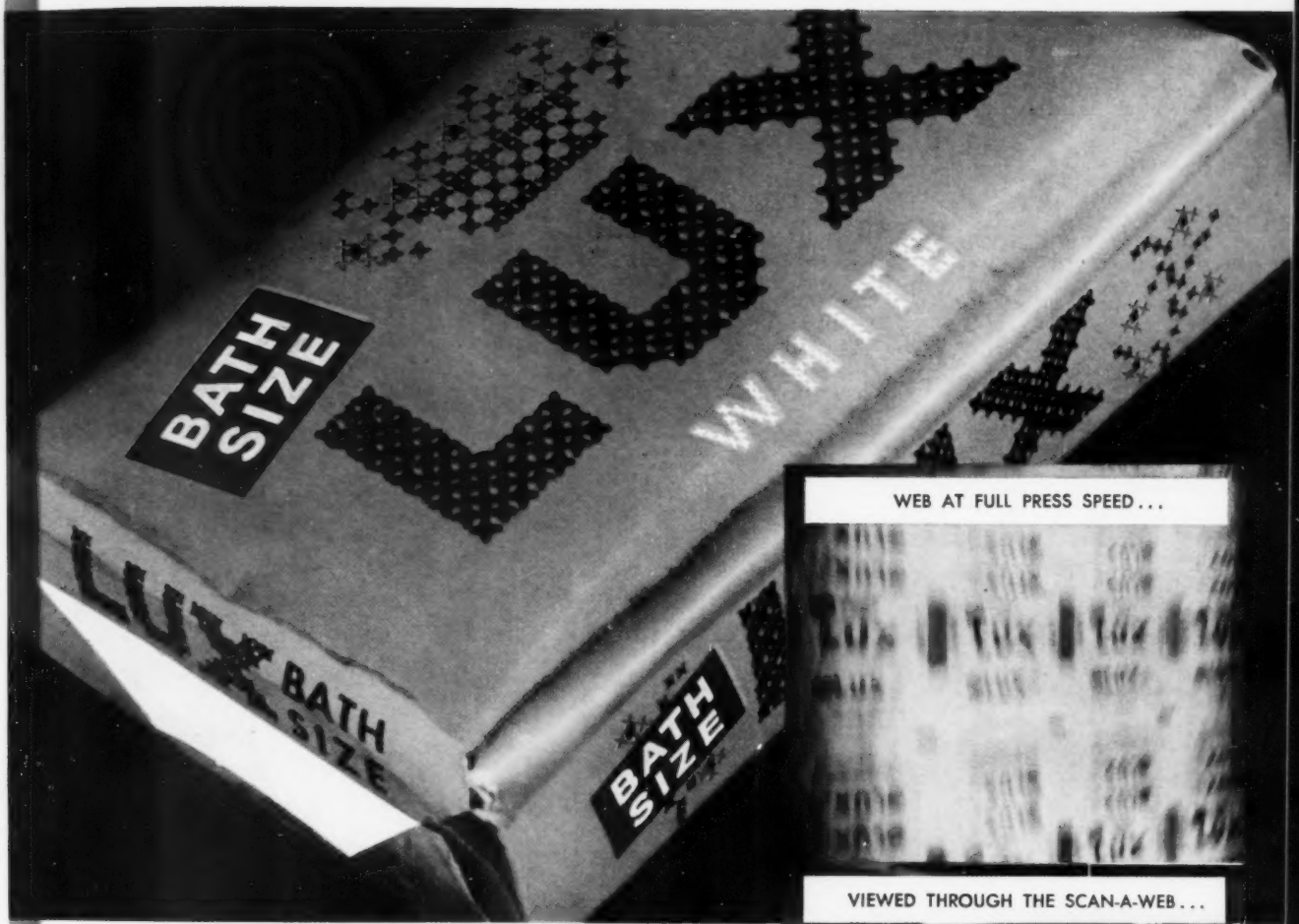
With a density of .917, the full line of Spencer 2200 series high-impact resins is available in melt indices of both two and four, with slip characteristics to meet your requirements. (See chart at right.)

For more information on "Poly-Eth" 2200 series resins, or for names of suppliers who have this film available, write to Spencer Chemical Company at the address shown at right.

PRODUCT	SLIP	MELT INDEX
2115	Low	2
2205	Low	2
2215	Med.	2
2235	High	2
2206	Low	4
2226	Low	4
2236	Med.	4
2256	High	4

SPENCER CHEMICAL COMPANY
Dwight Bldg., Kansas City 5, Mo

SCAN-A-WEB



Aided vision for web pressmen ▶

Printed non-stop at 450...yet no detail escapes pressman's eye

If ever a package had the look of quality, it's this one. Yet Strawberry-Hill Press, Inc., prints it at 450 feet per minute . . . with never a stop to check detail.

No need to stop!

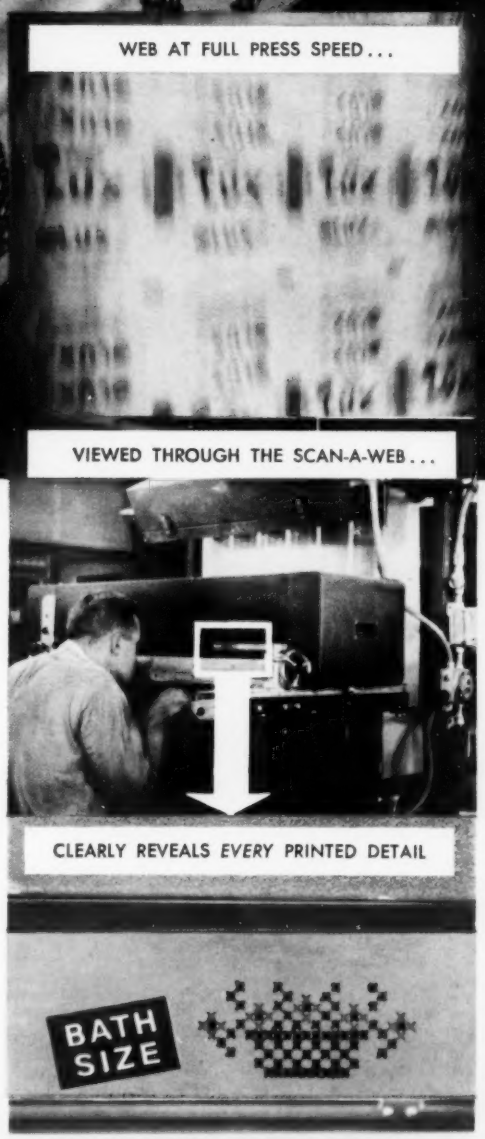
With the visual aid of SCAN-A-WEB*, optical "stop-motion" viewer designed and built by National Laboratories, every detail of reproduction quality is observable on the fly. The machine presents an image so steady and clear web pressmen can even pick out individual half-tone dots. See them in true size, shape and register at today's highest press speeds. True color, too.

With this unique aid, it's easy for an experienced eye to guard quality and make printing adjustments *without stopping the press*. That's why many major makes of web presses are made to accommodate SCAN-A-WEB viewers . . . why this equipment is standard in most high quality web printing plants, as it may be in yours.

*Registered trademark

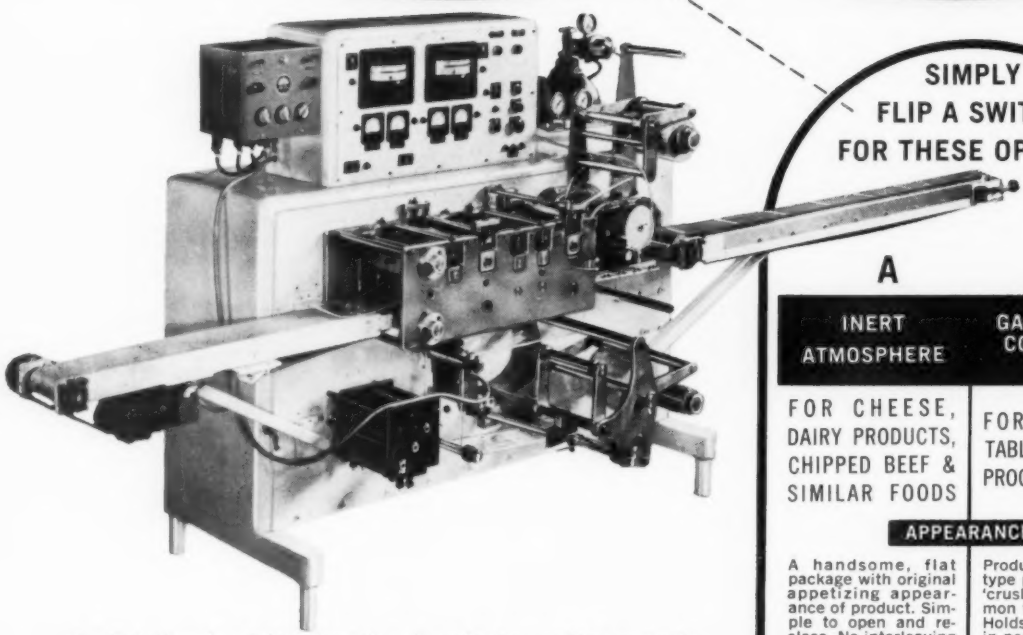
SCAN-A-WEB

NATIONAL LABORATORIES AND MFG. CORP., MIDLAND PARK, N. J.



4 REASONS WHY **ROTO-WRAP MODEL '300'** IS REGARDED AS THE ULTIMATE IN LOW-COST PACKAGING OF FOOD PRODUCTS!

1. A COMPLETELY AUTOMATIC HIGH SPEED PROCESS
2. PRODUCES COLLAPSED (VACUUM) OR FLAT (NITROGEN) PACKAGES
3. COMPLETE ADJUSTABILITY —¼" SIZE INCREMENTS!
4. DOUBLE-SEALED FOR HIGHEST QUALITY AND PROTECTION



The Roto-Wrap is a fully automatic unit packaging machine expressly designed for the sanitary handling of food products. The package is formed around the product, air is displaced by a nitrogen flush and a vacuum is drawn to remove any excess nitrogen, thus insuring the cling of the film to the product. If you are currently packaging your product by the vacuum/pouch method, tremendous savings can be achieved by the use of roll stock over prefabricated pouches and on labor required to hand load pouches.*

On products for which a vacuumized (collapsed) package is undesirable, the Roto-Wrap also provides complete inert gas packaging without the use of vacuum. As a further outstanding feature, Roto-Wrap offers complete flexibility in size, range—simple changeovers in both width and length. Thus, whether it's **nitrogen packaging** or **vacuum-type packaging** and different product sizes—you have the **cost-saving answer in this one machine!**

*For further details on this machine and our cost-comparison chart on how much it will save **you** on **your operation,** write:

CONAPAC CORPORATION
Sales Agents for Roto Wrap Machine Corp.
120 East 13th Street, New York 3, N. Y.

SIMPLY FLIP A SWITCH FOR THESE OPTIONS

	A	B
	INERT ATMOSPHERE	GAS FLUSH + CONTROLLED VACUUM
	FOR CHEESE, DAIRY PRODUCTS, CHIPPED BEEF & SIMILAR FOODS	FOR FISH AND TABLE-READY AND PROCESSED MEATS
APPEARANCE	A handsome, flat package with original appetizing appearance of product. Simple to open and reclose. No interleaving of slices necessary.	Produces a collapsed-type package without 'crushed' effect common to high vacuum. Holds product firmly in position.
EFFECT ON PRODUCT	Moisture content—and consequently, flavor—of product remains unaffected because it is unnecessary to draw a high vacuum with this process.	
PRESERVATIVE QUALITIES	Absolute minimum residual oxygen content **plus** positive protection of residual, captive inert gas.	

OTHER IMPORTANT FEATURES INCLUDE:

- Affords two-side registration
- Uses different materials in combination.
- No trays or stiffeners required

AWARD WINNING

A LURE to attract attention to your product line!

For an exciting and productive approach to your sales program try STARFOIL*, our exclusive method of printing by offset lithography on paper backed foil. Your product—NOW—foil printed, can stimulate sales with a luxury look—defying competition—and, at a moderate cost to you.

ALLURE to crystalize curiosity and translate it into volume sales!

STARFOIL* is articulate for labels, containers, tags, displays, inserts, brochures, circulars, box wraps and packages.

Companies with medium and small sized printing orders will welcome this opportunity for casting their line into a consumer area formerly posted "For Large Orders Only". No longer need you fish for sales with lackluster printing that struggles to attract a lone eye. With STARFOIL* your bait is right!

Discover this new AL-LURE today!

seaboard

LITHOGRAPH CORP.

147 WOOSTER STREET, NEW YORK 12, N. Y. GRamercy 5-3481

THESE FIRMS

Do Better with Doughboy

LABELERS

Mrs. Smith's Pretzel Co.
Easton, Pa.

J. P. Fritz Wholesale Co.
Newport, Minnesota

Bradley Candy Co.
Nashville, Tenn.

Dayton Nut Products Co.
Cincinnati, Ohio

Big-Tex Distributing Co.
Dallas, Texas

Fresno Macaroni Co.
Fresno, California

Burry Biscuit Co.
Elizabeth, New Jersey

General Candy Co.
Chicago 39, Illinois

Welch Nut & Candy Co.
Chicago, Illinois

Anderson Candies, Inc.
Wilmington, N. C.

King's Bakery, Inc.
Colledgedale, Tenn.

Seyfert Foods Co., Inc.
Fort Wayne, Indiana

C & C Distributors
Sharon, Pa.

Kimbell Candy Co.
Chicago, Illinois

Dorothy Flicek Industries
Chicago, Illinois

Boston Sausage & Provision Co.
Boston, Mass.

D. F. Stauffer Biscuit Co.
York, Pa.

Reed & Prince Mfg. Co.
Worcester, Mass.

Wells Mfg. Co.
New Vienna, Ohio

More Candy Co.
Rochester, N. Y.

Mrs. Slaby's Noodle Co.
Berwyn, Ill.

Ohio Art Co.
Bryan, Ohio

School House Candy Co.
Providence, Rhode Island

The Fleming Co., Inc.
Topeka, Kansas

Peanut Products Co.
Indianapolis, Ind. and Des Moines, Iowa

Walter Johnson Cookie Co.
Tulsa, Oklahoma

Flavour Candy Co.
Chicago, Illinois

Mason Candy Co.
Trinidad, Colorado

Barnard Nut Co.
Miami, Florida

H. H. Evon Co.
Chicago, Illinois

Mamma's Cookies Bakeries
Cicero, Illinois

Whites Food Products Co.
Oakland, California

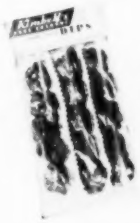
Pack twice as fast with

Doughboy

JAW SEALER-LABELERS

MODEL PJS

The new Doughboy Jaw Sealer-Labeler will do the work of two and sometimes three ordinary labeling machines. As soon as the bag touches the vacuum (air) control, the machine takes over and leaves operator's hands free to reach for the next bag. It automatically labels, seals, and if desired, codes and punches the package. The automatic cycle cuts operator motions, increases production speed and assures better packaging. Pneumatic pick-up assures *positive* single label delivery from label box to sealing jaws. Label clamp holding bar assures *positive* positioning of label at sealing jaw. Adjustable folding bar assures *positive* label folding.



CODER AND HOLE PUNCH OPTIONAL

Coder and Hole punch are optional. An embossed code is precision made from metal type which is easily placed in accessible holder at the front of the sealing jaw. The punch, made of high carbon steel, punches a clean edged, round hole exactly centered in label.

Doughboy

INDUSTRIES, INC.
MECHANICAL DIVISION
NEW RICHMOND, WISCONSIN, U.S.A.

PROTECTIVE PACKAGING...with the *basic* sa

New "K" cellophanes provide superior vapor barrier... retain flavors, offer extra durability with brilliant transparency

People like to see what they buy. That's why it's smart to start with transparency in package planning. Crystal-clear Du Pont cellophane lets your product's personality sell for itself... and Du Pont's over 100 varieties of cellophane, led by the extra protective "K" types, can give you the correct protection your product requires. Too, cellophane offers you excellent printability, efficient high-speed production.

Du Pont has 34 years' experience developing and producing transparent films. Let this experience help you to a better package. See your Du Pont Representative or your Du Pont Authorized Converter. E. I. du Pont de Nemours & Co. (Inc.), Film Dept., Wilmington 98, Del.

sales power of pure transparency

DU PONT
REG. U. S. PAT. OFF.

BETTER THINGS FOR BETTER LIVING
. . . THROUGH CHEMISTRY

DU PONT
cellophane

With Bernardin · Quality is a **SERIES** of satisfactions

ARTIST AT WORK

Steel is his canvas, a radial drill his brush; but this craftsman is an artist in accuracy for he works to a tolerance, in this 42-stage mold, of .0005".

From this mold will come the beginning of Bernardin Plastic Closures; precise in dimension, tough, resilient, beautiful. Then, through control after control, they flow through Production to emerge as immaculate caps, designed to protect and grace some of the nation's foremost pharmaceuticals, chemicals, cosmetics, and household products.

Machines alone do not make Bernardin Closures. Veteran craftsmen guide these machines and guard their output; for ability and pride are treasured quality controls, too, at Bernardin, where Quality must deliver a *series* of satisfactions.

QUALITY METAL AND PLASTIC CLOSURES BY

BERNARDIN

Bernardin Bottle Cap Co., Evansville, Ind.

As for progress, the most brilliant achievement of the corrugated-container industry in recent years has been its transformation of the shipping box from a drab, utilitarian container into a colorful, well-designed aid to modern merchandising and advertising. This has been done through improved printing surfaces, improved printing processes and a general campaign to make packagers conscious of the merchandising power of the shipping container. Today, the corrugated container plays a dual role.

QUOTED FROM
MODERN PACKAGING
OCTOBER 1958

TALK ABOUT PROGRESS IN SHIPPING CONTAINERS ...LEADS RIGHT TO ST. REGIS SEMINOLE

Like the editors of Modern Packaging, we realize that the corrugated container today is more than just a vehicle to ship and protect your product. It's become a vehicle for identification, advertising and merchandising.

To meet this need, we created St. Regis Seminole—the ultimate in linerboard for both protection and printability. This strong, superior kraft, with its smoother, uniform surface and light color, gives new contrast and crispness to your brand name and selling message. Even detailed trademarks register clearly.

Make this new standard of quality part of your packaging program. When you talk to your boxmaker, specify St. Regis Seminole!

This insert is printed on 38# St. Regis Seminole

KRAFT DIVISION
St.Regis PAPER COMPANY
150 EAST 42nd STREET, NEW YORK 17, N.Y.

World Report *Abstracts from leading foreign packaging magazines*

ENGLAND:

One-piece, low-cost polyvinyl chloride tubes

A variety of benefits—in cost, on the packaging line, in product protection and in consumer appeal—are foreseen by the British magazine *Packaging* for one-piece, collapsible polyvinyl chloride tubes, a French development, which have just been made available to British packagers. Produced by a combination of extrusion and forming techniques, the low-cost tubes (shaped like conventional roll-up metal tubes) are reported to possess all the virtues of an extrusion-formed body, such as dimensional accuracy and uniform wall thickness. But because tube body and head are integral, there is no weakness at the shoulder, according to the article. Screw threads on the nozzle are shaped during the forming process, so there are, reportedly, no mold marks or other irregularities to impair perfect seal when the cap is applied. The resilient tubes are easily filled on standard tube-filling machinery, modified to heat seal tube ends. The property of resilience affords two additional economies, the article explains: The tubes can be bulk packed for shipment in a minimum of space without fear of container damage and the printable tubes need not be individually cartoned, because they stand up well under handling at the point of sale and in the home. It is expected that the PVC tubes will find their biggest early markets in the cosmetic and pharmaceutical fields. Internal coating with non-toxic polyvinylidene chloride lacquer (a barrier against the transmission of water vapor and gases) is expected to broaden their application into the food field.

FRANCE:

Advance in aluminum aerosol containers

A step forward in the development of the one-piece, bottle-shaped aluminum aerosol can has been taken by a French company, reports the packaging magazine *Technique d'Emballage*. According to the article, the company has perfected automatic equipment for reshaping and bending the impact-extruded can bodies produced in the first forming operation. This new, fully integrated manufacturing line is said to increase production speeds and to provide for printing in up to four colors. Among the problems that had to be solved in developing the equipment were: determination of the different thicknesses of wall needed to resist high internal pressures, determination of the angles and curvatures required to resist axial compression during insertion of the valve unit and adaptation of offset printing machinery to multicolor printing at high speeds. In addition, a unit had to be constructed for simultaneous internal and external container lacquering and enameling, as well as lehrs to polymerize the protective coating and finish at high temperatures.

GERMANY:

Hazards of plastics in food packaging

A special committee has been working in Germany since the spring of 1957 to investigate the hazards of plastic materials in packaging foodstuffs and to set regulations on their use in the interest of public health. Provisional results of the committee's activities are published in *Verpackungs Rundschau*. The article deals with plasticizers that cannot be used because their migration into foodstuffs can be proved and with materials that can be allowed under certain restrictions and conditions. The same issue contains an article dealing with the question: Should polyethylene, colored with poisonous pigments during the processing, be rejected for the packaging of foodstuffs? The author's conclusion is that it need not be rejected, provided the pigments are mixed with the granules in very fine particles and a homogeneous compound has been obtained in further processing. He points out that in such a formulation, the color pigments are encapsulated, forming globules with a polyethylene "skin" that prevents the poisonous matter from coming into contact with the food. However, the author warns, strict conditions must be maintained in the processing of the material.

BELGIUM:

Squeeze dispenser cuts product spoilage 30%

How a company was able to reduce product spoilage 30% by switching to a heat-sealed polyester-film dispenser package for a solvent-containing adhesive product is revealed by an article in *Institut Belge de l'Emballage*. Because it must be spread evenly and quickly over a given area, the product was formerly packaged in wide-mouthed drums and applied by brush or spatula. The acute problem in this type of container was that the volatile solvent evaporated rapidly when exposed to the air, making unusable a considerable portion of the adhesive in the open drum. The new thermoplastic squeeze package, which is cut open at the point of use, has a slot aperture less than ½ in. wide through which the product is dispensed in a flat ribbon. Because of the small package opening and the convenience of squeeze dispensing, the article concludes, the detrimental effect of environmental atmosphere on container contents has been lessened drastically without loss of necessary adhesive-application speed.

ENGLAND:

Another advance for edible dip coatings

Relatively new though they are, thermoplastic films for food packaging already can cast an anxious glance over their collective shoulders at what in time may prove a formidable competitor in many applications—a range of edible dip coatings called acetoglycerides. That's the proposition advanced in a technical report in *Packaging*. Acetoglycerides are wax-like solids with extreme pliability over a wide temperature range, great stability to atmospheric oxidation and very low gas permeability. After tests conducted on a number of non-packaged foods, the author concludes that acetoglycerides may soon be used to complement—and in some cases to replace—thermoplastic packaging films. An example is a test carried out on whole English Cheddar cheeses. One cheese was coated with a liquid acetoglyceride that solidified swiftly; the other was left untreated. After six months' shelf storage under conditions approximating in-store environment, the untreated cheese had suffered substantial weight loss and rind formation, and had been attacked by mold and cheese mites. The dip-coated specimen, however, remained practically unchanged throughout the test period.

HOLLAND:

Polystyrene cigar box with hinged lid

In Holland, as in the U. S., popular-priced five-packs of cigars offer a rugged competitive challenge to packagers. How one enterprising company—N. V. Velasquez Sigarenfabrieken—has met this challenge successfully by packing its Zamora

World Report [*Continued*]

cigars in a hinged-lid polystyrene case is discussed in the Dutch publication, *Verpakking*. The German-made protective package consists of a fluted body and transparent lid. The decorative flutings give strength and rigidity to the box while permitting the use of a minimum of plastic in the fabrication. The lid, stiffened by a thickening of the wall around the rim, is curved at the hinge end to give the box an open appearance. A simple latch device at the opposite end allows easy opening and secure reclosure of the case.

FRANCE:

Crease control in vacuum pouches

A critical problem in the production of vacuumized film pouch packages is the formation of creases at the welding or sealing line. These creases (of varying length and width) occur whether the packages are produced on machines of the suction-tube type or on those having a vacuum chamber, since in either case the surplus packaging film must be accommodated at the sealing point. A newly patented idea, described in *Emballages*, is intended to solve the problem. A strip of relatively rigid paperboard, corrugated across its width, is introduced into the pouch just before sealing. The seal is made over this corrugated strip so that the creases—which would otherwise form irregularly—are guided into the corrugations, where they settle into a neat, even pattern as air continues to be withdrawn. In addition to contributing to a better-looking package, the article points out, the corrugated strip can be printed to serve as a label.

ENGLAND:

Butane-gas dispenser seals itself after each use

A tubular aluminum container that dispenses the exact amount of butane gas needed to refill a cigarette lighter, then seals itself to prevent escape of the remaining gas, has been developed for Ronson Products, Ltd. The intriguing new package, which offers use possibilities with many types of refillable merchandise, goes by the name of Multi-Fill. As reported in *Packaging News*, its self-sealing action is on much the same principle as the tubeless automobile tire. The rigid aluminum container, filled with about 1 oz. of liquefied butane, has a disk of synthetic rubber fitted into its nozzle. When the nozzle end is pressed into the filling orifice of the butane lighter, a hollow needle built into the lighter's chamber pierces the rubber disk, releasing the gas. Exact fill is assured because product flow ceases when gas pressure in the chamber equals that in the dispenser. When the needle is withdrawn, a plastic flow of rubber occurs around the puncture in the disk (just as a tubeless tire seals itself when a nail is removed), tightly resealing the dispenser until next use. The container (5 in. long and 1¼ in. in diameter) reportedly will withstand bursting pressure of 950 p.s.i. Since the butane its filled at 50-lb. pressure, there is an ample margin of safety.

GERMANY:

Gas sterilization of film food packages

The practicability of heat sterilization of film-packaged foods is limited because such films may weaken, collapse or deform under the heat required, says the German publication, *Die Neue Verpackung*. For this reason, special investigations have been carried out to determine whether film-packaged products could be effectually sterilized by the use of germicidal gases. Although the gas-permeability factor of various plastic films imposes limitations, satisfactory results reportedly have been obtained by the use of filtered ethylene oxide. This article elaborates the problems of heat sterilization and tabulates the deformation temperatures of the more common films. Although some of them will withstand heat sterilization, it is pointed out that—for economic reasons—polypropylene, polyamide and polyethylene terephthalate are the only materials likely to be used. Two gases have been considered as sterilants: formaldehyde and ethylene oxide. The latter, in proper concentration, has been found to offer a satisfactory level of sterilization against bacteria, vegetable spores and viruses, the article concludes.

POLAND:

Proposed packaging center and laboratory

Plans are in the works to improve the over-all level of the packaging industry in Poland by creating a Polish packaging center and packaging laboratory. Coordination of their activities, says an article in the Polish packaging magazine *Opakowanie*, should be handled by a Packaging Institute composed of technicians who will assume consultative responsibilities and be in charge of the production of publications dealing with specific aspects of the packaging industry and their application. The functions of the packaging laboratory are seen as: advice in the selection of materials and in construction or adaptation of the package; technical guidance on packaging production; advice on export packaging; study of materials and methods; determination of physical characteristics, and advice on handling and distribution methods.

DENMARK:

Danish Packaging Institute is established

Included among the plans for the recently organized Danish Packaging Institute is the creation of a packaging laboratory which will be allied to the printing institute, the Government testing station and the technological institute. Writing in *Dansk Emballage Tidende*, the director of DPI emphasizes the importance of its association with the European Packaging Federation and outlines plans for a study conference to be held in Halsingborg during 1959.

HOLLAND:

Salad dressing in a protective film pouch

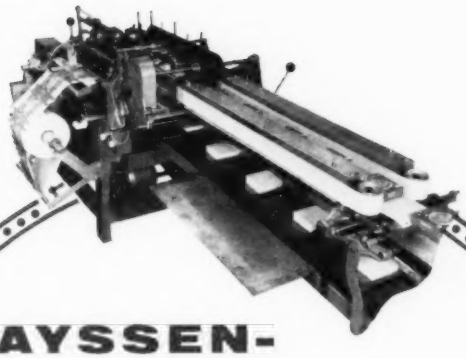
Now on the market in Holland is an oily salad dressing in a polyethylene-coated cellophane film pouch. The package, reports *Verpakking*, affords excellent protection as well as visibility for the product, which is made up of 50% olive oil emulsified with a mixture of mustard, spices, egg and wine. The film stock is gravure printed with brand and product data before the polyethylene coating is applied.

ENGLAND:

Bondable color printing on plastic containers

By teaming up a plastics-printing machine with a new range of dry pigments, containers of any type of plastic can be printed indelibly at speeds of 2,000 per hour, then boxed or stacked immediately without risk of color smudging, says the British publication, *Packaging News*. The pigments are so formulated that any type of plastic to be printed can be matched by a pigment base, assuring a secure bond between the color and the container's surface, the article says. Basis of the printing system is a brass, steel or zinc block (engraved or etched) that carries the lettering or design in reverse. The block is heated, then laid across the object to be printed. The under side of the strip is coated with dry pigment. Where the raised portions of the printing block touch the upper surface of the strip, heat and pressure melt the pigment, transferring it to the container below. Since the pigment base is the same type of plastic as the material being printed, the pigment fuses permanently to the container surface, where it dries instantly.

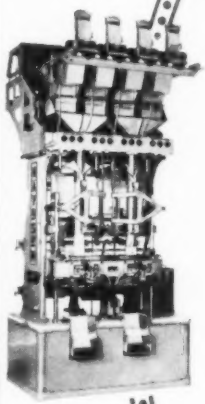
For additional information on any item, write: World Report Editor, MODERN PACKAGING, 575 Madison Ave., New York 22.

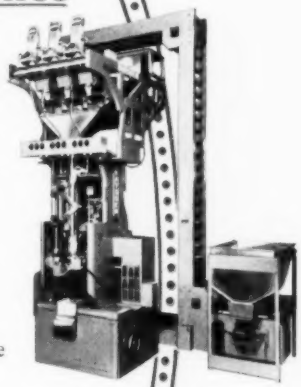


HAYSSEN-

the world's oldest and largest manufacturer exclusively of

Wrapping and Packaging Machines

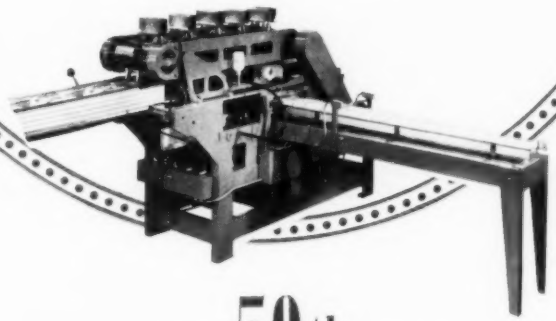




Since the pioneer conception of automatic wrapping by Grandfather Hayssen 'way back in 1910, keeping ahead of manufacturer's needs has meant dedicated vigilance at Hayssen. Beside this obsession to produce the best equipment possible, Hayssen has insisted on treating every manufacturer as our special problem and friend. We build each machine to suit your own specific need.

Through the years this has developed into a respected reputation which we value above all else. This is why we build into each Hayssen machine a feature priceless to us and to you, a reputation we aim to protect.

Our exclusive acceptance in so many fields of processing and manufacturing impels us to implore you to take advantage of this "half century" of dedication and experience.



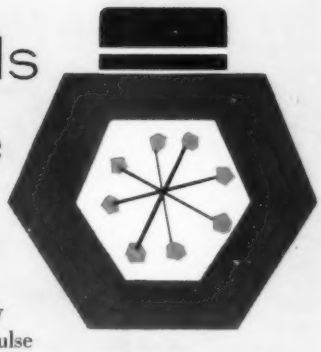
THIS IS OUR 50th YEAR AT

HAYSSEN

Let our experienced packaging engineers help you with your packaging problems. Contact us TODAY!

HAYSSEN MANUFACTURING CO. • DEPT. MP-1 • SHEBOYGAN, WIS. • *Sales Offices In:* Atlanta • Boston • Chicago • Dallas • Denver • Detroit
Jackson, Miss. • Kansas City • Los Angeles • Minneapolis • New York • Philadelphia • St. Louis • San Francisco • Montreal • Toronto • Vancouver

Paramount Labels **TRIGGER** the **pick-it-up impulse**



The browsing shopper sees a thousand packages. Suddenly something clicks and he picks up *one* of them. A sale is made. Impulse buying? Yes — but not *random* buying. The product he chose had something special that clicked. In the competition for shoppers' attention, nothing makes a product click like the merchandising flair of Paramount labels. Their attention-getting color, design, and appeal can give your product this edge. Let us show you what we can do. Paramount's design service for improving your present label, or designing a new one is free.

Paramount labels make you money.

PARAMOUNT PAPER PRODUCTS COMPANY

4401 N. 23rd St., Omaha 10, Nebr. In Canada, 218 Front St. E., Toronto

Label Manufacturers — Specialty Tape Printers

TULOX®
EXTRUDED
PLASTICS,
INC.
General Offices: Norwalk, Connecticut
...ts: Norwalk, Connecticut • Marion, Indiana

A fair question . . . because shape is often the "secret ingredient" in an outstanding package design.

Here, for example, are five famous products . . . each distinctively presented in a different shaped Tulox container. Shape has contributed to the success of these packages in effective display and product-brand identification. Shape has also permitted "tailoring" the container to the product in each case to assure protection, for convenient insertion or removal, to facilitate storage as well as shelf or counter arrangement.

Only Tulox Semi-Rigid Extruded Plastic Containers permit so wide a selection of these and other attractive, practical shapes and sizes. Tulox is available crystal clear or in brilliant colors, printed or plain and with an equally wide choice of colored closures . . . also comes in the form of sleeves, sheaths or scabbards and may be combined effectively with inserts of other materials.

Furthermore, unique precision production methods permit development of these unusual quality packages, on a volume basis, at a cost often 'way below that of less attractive alternatives. If you would like to see your product in such good company, call upon us for a study of the possibilities.

S... ...i-Rigid Seamless Plastic Packages

1EP59

FLASH!

NIBROC® WHITE scores three years in a row!

NIBROC WINS 2 OF 3 PAPER BAG AWARDS IN
1958 NATIONAL FLEXIBLE PACKAGING COMPETITIO

Jackson's Oatmeal Cookies,
Jackson Cookie Co.,
by Continental Can Co.,
Flexible Packaging Div.
"Printed by letterpress.
Self-service in handsome
sanitary, large
family-size package."

White Ring Flour, N. C. Cole
Milling Co., by Arkell & Smiths.
"Clay coated, wax buffed,
super-calendered white kraft bags,
printed by 5-color letterpress.
Faithful product reproduction
on soft-sheen sheet."

Nibroc White does it again!
Four of five top awards for Paper Bags
in the National Packaging Exhibition in
1956. Three more "Firsts" in 1957. And now,
in 1958, two awards out of three!

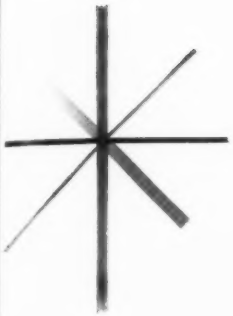
PAPER PACKED WITH SALES POWER

Why not take advantage of Nibroc White
to give your package a first in sales? Let Nibroc's
brilliant whiteness, its strength and protection,
do full justice to your fine products—coffee,
flour, rice, tea, cake mix, dog food, others!

Get superior visibility, printability, workability!
Perfect for bag forming, filling and closing machines, too.
Send for free samples and information.
Phone, or write Dept. RD-1, Boston.

BROWN QUALITY COMPANY

General Sales Offices:
150 Causeway Street, Boston 14, Mass.
Mills: Berlin and Gorham, N. H.



Better labeling...less work ...the HEAT SEAL way!

Labels by Steigerwald

Fine labels of all kinds at reasonable cost

Heat Seal requires no glue, no water, no clean-up. Ideal for bag headers and containers of practically all shapes and materials. Instantaneous or delayed action. Made to exact specifications, for use with high speed equipment. Continuous rolls or individual.

Send your present labels for redesign, without charge or obligation, or for estimate on printing in present form. A. M. Steigerwald Company, 910 West Van Buren Street, Chicago 7. Taylor 9-5400.

CINNATI 27, O.
...ier & Son, Inc.
...nt Center Bldg.
1-0222

DETROIT 3, MICH.
Harry W. Hogg
20157 Greeley Ave.
Diamond 1-3848

LOUISVILLE, KY.
Practical Products Co.
319 Jefferson St.
Juniper 7-1257

CLEVELAND 14, O.
A. C. Foster
1747 Chester Ave.
Cherry 1-2468

KANSAS CITY 5, MO.
A. B. Mason
905 Jefferson St.
Victor 2-6580

MILWAUKEE, WIS.
H. C. Lackowski
8849 So. 76th St.
Garden 5-5850

MINNEAPOLIS, MINN.
J. E. & J. L. Moor
3329 Dupont Ave., So.
Taylor 4-5309

ROCKFORD, ILL.
Blackhawk Paper & Cordage
630 Cedar St.
4-5261

NEW YORK 25, N. Y.
John H. McLaren
500 West 111th St.
Monument 2-0237

ST. LOUIS 5, MO.
Marvin Yates Co.
111 So. Bemiston Ave.
Parkview 6-0296

...R EMBOSSED • DIE-CUT OR SQUARE • FOIL SEALS AND TAGS • FLAT OR CONTINUOUS ROLLS • FOR HAND OR AUTOMATIC USE • HEAT SEAL • PRESSURE SENSITIVE • SPECIAL ADHESIVES

Engineered for Elegance & Efficiency

Aluminum Aerosols by *PEERLESS* have these important advantages

FOR YOUR CUSTOMER 1. Combined durability with beauty. 2. Contents cannot spill, leak or evaporate. 3. Best method of dispensing many products. 4. Sizes ideal for travel, the purse, the vanity table and the medicine cabinet.

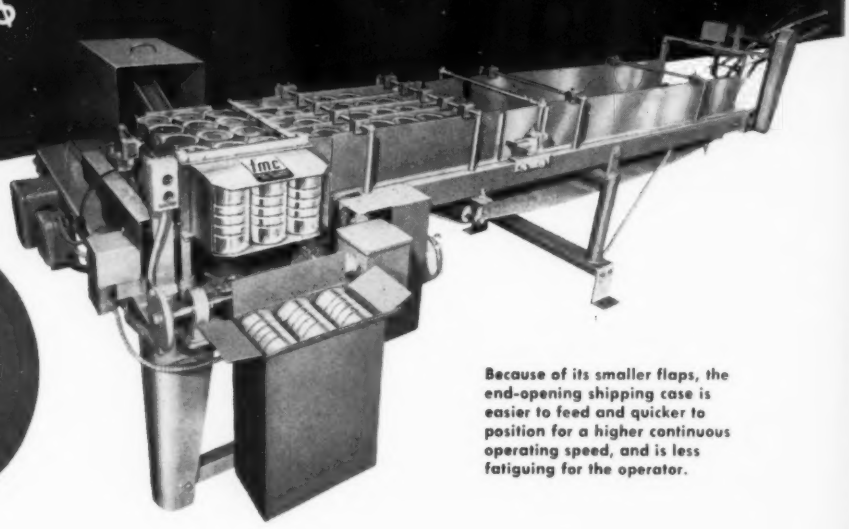
FOR YOU 1. Preciseness of valve-cup fit greatly improved by patented* process. 2. Container is sturdy and seamless to withstand all required pressures. 3. Tested by more than three years of manufacture and use. 4. Available in a choice of diameters and lengths for each size—½-ounce to 4-ounce.

NO FINER METAL CONTAINERS MADE ANYWHERE **PEERLESS** *TUBE COMPANY*

BLOOMFIELD, NEW JERSEY

*U. S. PATENT NO. 2,856,102 — OCTOBER 14, 1958

Save WITH THIS COST CUTTING CAN CASER



Because of its smaller flaps, the end-opening shipping case is easier to feed and quicker to position for a higher continuous operating speed, and is less fatiguing for the operator.

fmc

NON-SHOCK

END-OPEN CASER

FOR SINGLE TIER LOADING

46 OZ. AND NO. 10 CANS

AND OTHER CAN SIZES

With end-opening shipping cases showing a savings of about 15% in fibre alone, no wonder packers using single tier patterns have welcomed FMC's development of this continuous, high speed, automatic caser. Employing many of the key design and construction features of the FMC Model 3 Caser for top-opening cases, this new machine easily handles 1200 cases per hour or more, limited only by the speed of the operator. Cans enter the machine upright, eliminating rolling can impact. As a result, there is no tearing of labels or scratching of lithography; no body dents or split seams. Although used largely for the more common can sizes cased in single tiers (46 oz. and No. 10 cans), the FMC Non-Shock End-Open Caser may also be built for single tier packs of smaller size cans. This machine is a truly remarkable achievement in the field of automatic casing equipment. Write today for complete information, or call your nearest FMC representative.

fmc FOOD MACHINERY AND CHEMICAL CORPORATION ®

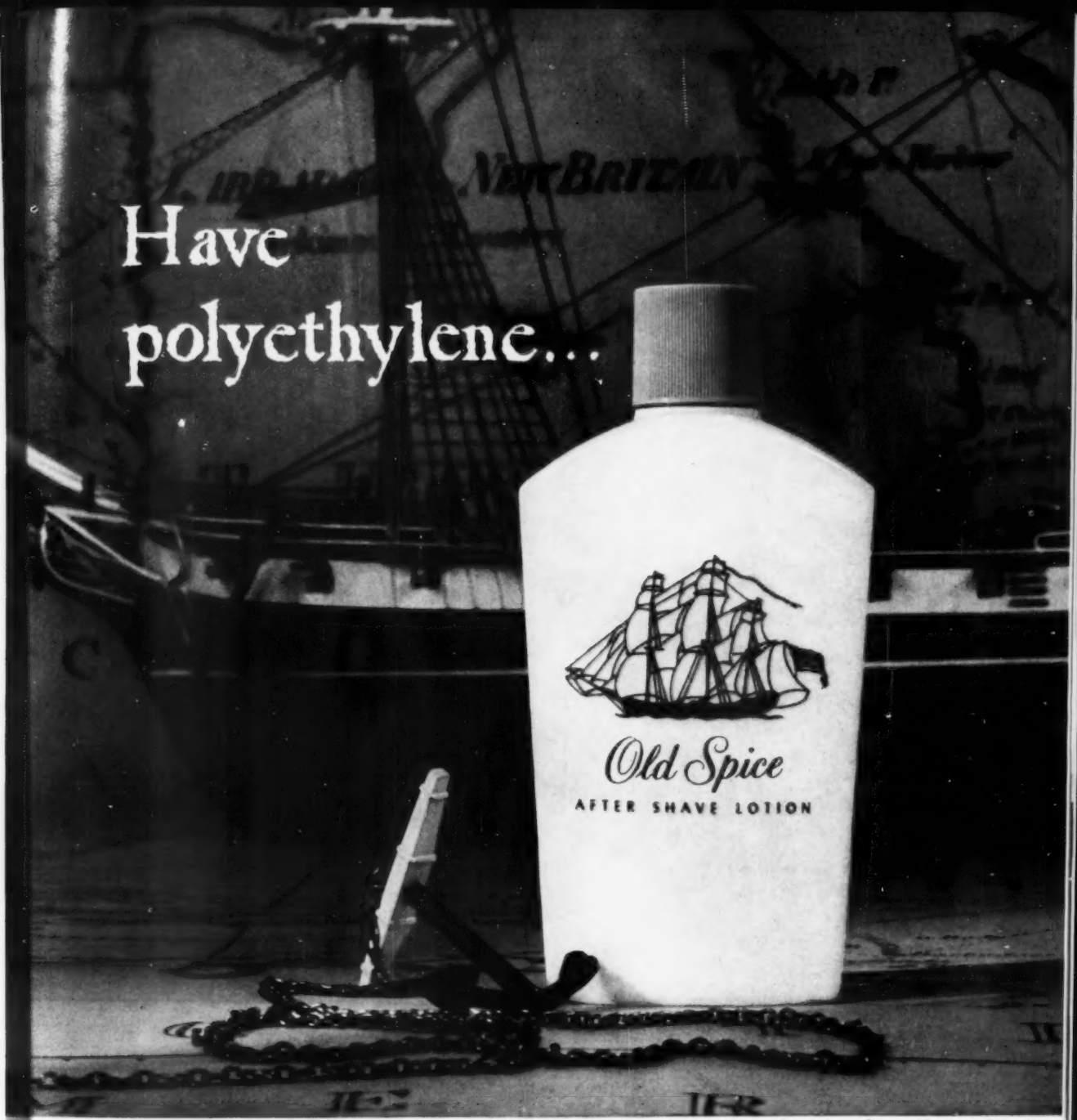
Putting Ideas to Work

FOOD MACHINERY AND CHEMICAL CORPORATION

Canning Machinery Division

General Sales Offices:

WESTERN: SAN JOSE, CALIF. • EASTERN: HOOPESTON, ILL.



Bottle molded of BAKELITE Brand Polyethylene by Imco Container Corp., Kansas City, Mo.

...will travel

... and no cargo of its kind ever traveled more safely or in greater style. Squeeze bottles made of BAKELITE Brand Polyethylene permit traditional design to combine with modern non-breakable practicality. The result: smoother sailing for sales. Ask your packaging supplier, or write Dept. AD-07G, Union Carbide Plastics Company, Division of Union Carbide Corporation, 30 East 42nd Street, New York 17, N. Y.

In Canada: Carbide Chemicals Company, Division of Union Carbide Canada Limited, Toronto 7.

BAKELITE COMPANY *has a new name*

UNION CARBIDE **PLASTICS COMPANY**
DIVISION OF UNION CARBIDE CORPORATION

BAKELITE and UNION CARBIDE are registered trade-marks of UCC.

The **FLAVOR** of the package is important, too!

Carton designed by Ben Larsen

Here's a packaging "delicacy." Vivid. Dramatic. With attention-getting, appetite-whetting appeal aplenty. Its colorful pictorial "flavor" provokes strong buy-now impulses—the entree to increased sales.

Like to give your product a new standout pictorial personality? Gardner design and full-line reproduction facilities can wrap your product in a mantle of good taste to help wrap-up more sales for you. Call or write today for details.

Persuasive Packaging

DIAMOND GARDNER CORPORATION

diamond gardner GARDNER DIVISION • *Main Offices:* Middletown, Ohio

Editorial Memo

Introducing a new cover series

Walter Murch, commissioned to paint 10 of this year's MODERN PACKAGING covers, is recognized as one of the foremost creative artists working in oils. To the illustration of our series on Great Packaging Discoveries, Murch brings a talent that won the Gold Medal of the Philadelphia Art Directors Club for one of his *Fortune* magazine covers, the Gold Medal of the New York Art Directors Club for one of his series of National City Bank advertising illustrations and permanent representation in 13 museums and art galleries. His work has appeared in one-man and group shows across the country, in Europe and in Japan. Critics have lauded his ability to depict the products of science and industry with a "pensive and poetic realism."

This month we launch a new series of cover articles, exploring an area which is perhaps the most vital of all to packaging progress.

These will be the stories of *Great Packaging Discoveries.* We picked those words carefully. We mean "discovery" in the sense that these have been the fundamentally new and revolutionary discoveries, rather than evolutionary developments. These have been the "great" milestones of progress, in that each, as it came, immediately opened up a whole new area, or a completely new concept, in packaging. And in each case the discovery has come and its greatness has been proved within the memories of most of us now active in the field.

We do not intend to delve into ancient history. For our primary purpose in the series is to bring home to each of us the point that progress in packaging through research is a present-day, living thing —that so many of the ideas on which this field is growing and prospering are products not of ancient savants, but of men like the man who works in your laboratory right down the hall.

So it follows that with proper support for research, there are many great things still to come—today, tomorrow and the next day. We cannot attempt to suggest what they will be. But by probing deeply into the circumstances by which great discoveries of the recent past have come about, we hope to show you how they may happen—and how you can *make* them happen.

There is a lesson, for example, in the discovery of moistureproof cellophane, which is the subject of the first article of this series, starting on p. 82 of this issue. It would be difficult to imagine our packaging world today without moistureproof cellophane—but it was created only in 1927 because some dedicated researchers in Du Pont's laboratories saw the need and the opportunity.

Although moistureproof cellophane is one of the oldest discoveries in our series, one of its co-inventors is still very active in the field of flexible packaging and the other died only a few months ago.

It is significant, too, that while cellophane was basically a European development, it was American ingenuity that added the qualities of moistureproofness and heat sealability that made it great. With a number of other European developments just now reaching our shores, it is clear that with continued emphasis on research we can continue not merely to adapt, but to improve.

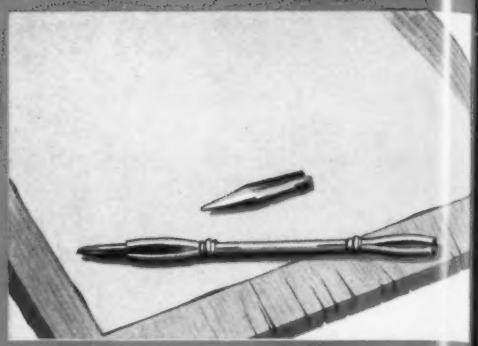
To set the theme pictorially for this series, we are introducing a medium of illustration which to the best of our knowledge has never been used on the covers of any industrial magazine. We have commissioned the renowned painter, Walter Murch, to do a series of 10 oil paintings, the first of which appears on the cover of this issue. To the left, you will find a portrait and brief biography of Mr. Murch.

The editors

Modern Packaging
Executive and Editorial Offices
575 Madison Avenue
New York 22, New York

It is the talent of the maker that creates the worth of any paper product . . . and it is this same "Touch of Talent" that Nashua uses to design and print, hard-sell packaging for you.

NASHUA Talents Available To You . . . Creative Design • Paper Chemistry • Package Engineering Coordinated Packaging • Quality Production • Procurement Versatility • Nashua Corp., Nashua, N.H.

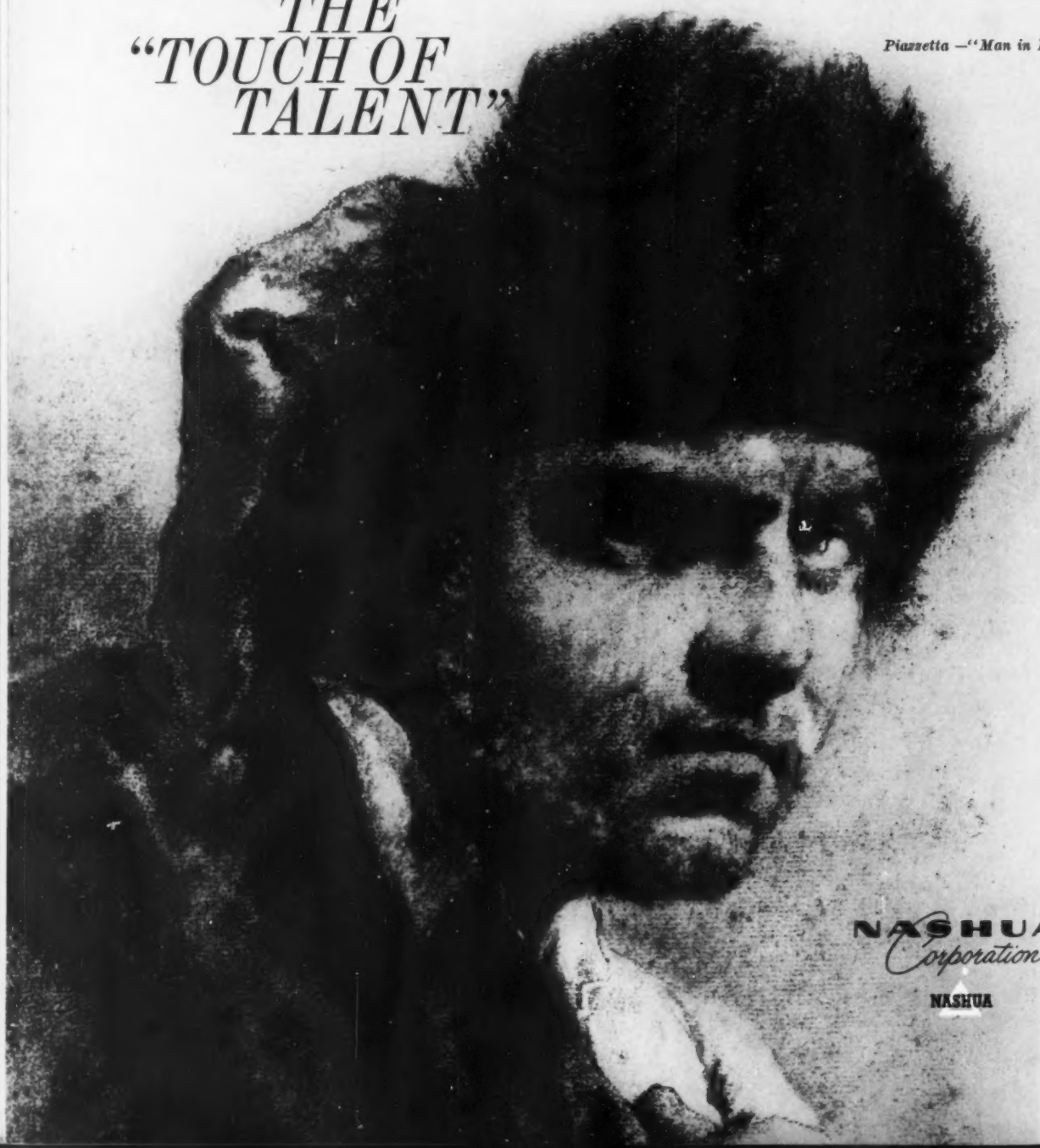


Venetian papers of the early 17th century were generally known for their excellence . . .

. . . but it still took the talent of Piazzetta to transform this paper into a museum piece.

PAPER NEEDS THE "TOUCH OF TALENT"

Piazzetta —"Man in Fur Cap"

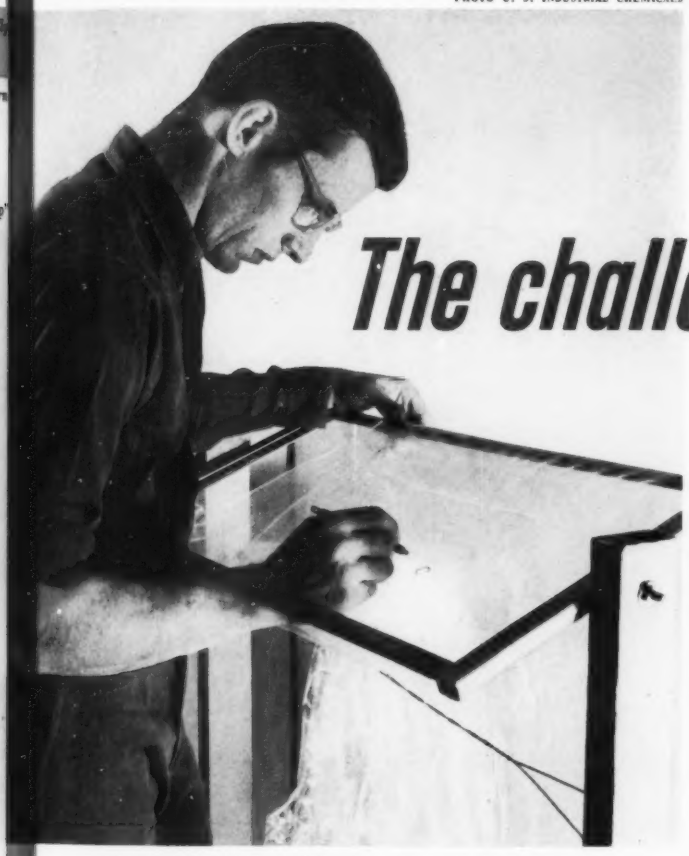


NASHUA Corporation

NASHUA

January 1959
Vol. 32 No. 5
MODERN PACKAGING

PHOTO U. S. INDUSTRIAL CHEMICALS



The challenges ahead

From the year past,
full of enterprise and progress
we draw a picture
of the opportunities
on which further advances
in packaging
will be built in 1959

The search for quality *is an incessant challenge to packaging-materials suppliers and users in their effort to improve protective qualities and machine-handling characteristics while effecting economies. This laboratory technician is checking film for structural irregularities.*

As we close an eventful year, in which packaging has again demonstrated its power to resist and to run counter to a business downturn, four areas can be perceived in which the trends of recent developments are creating major challenges for the year ahead. The opportunities for 1959 are in:

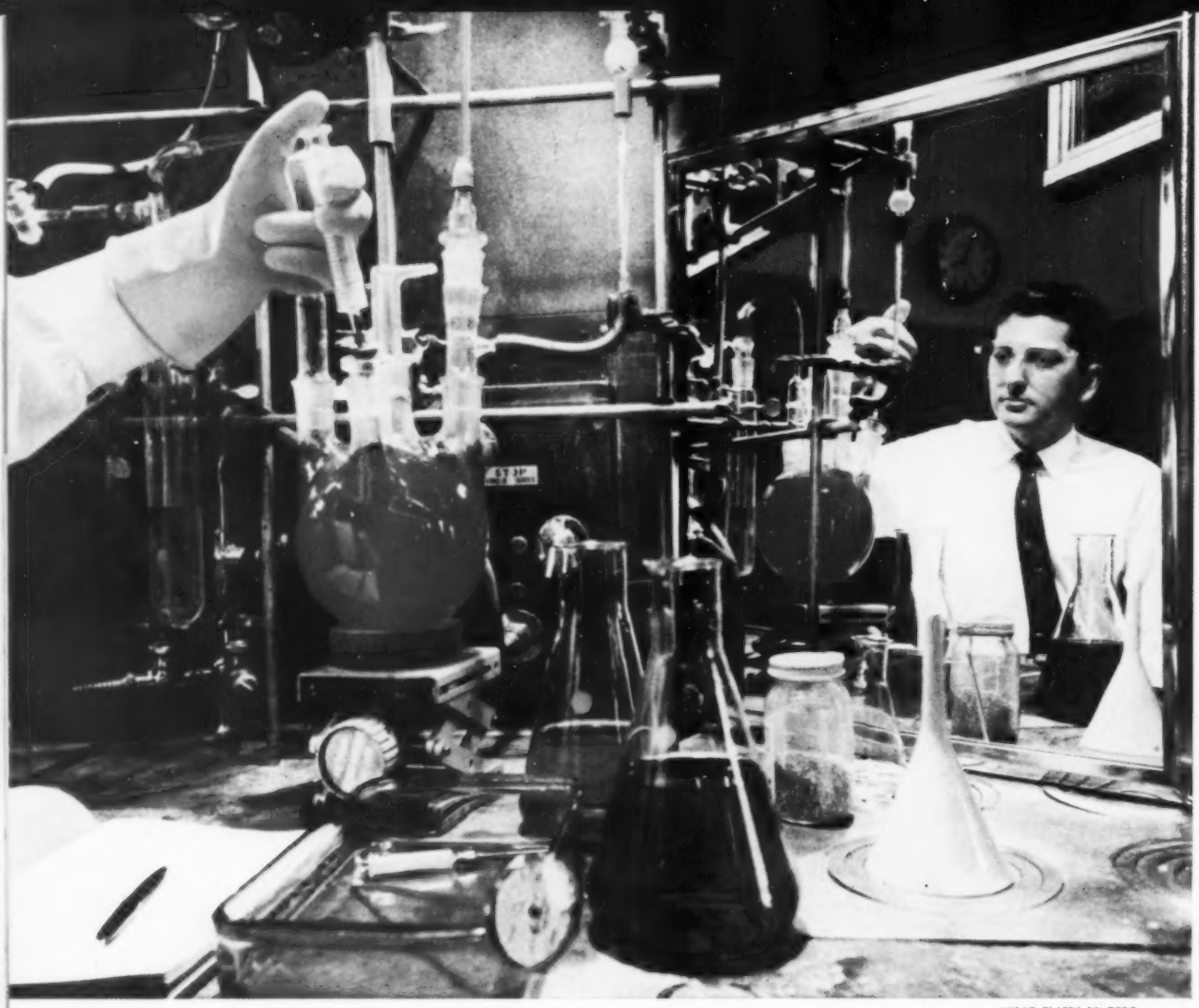
- New materials
- New container applications
- Engineering advances
- The strategy of dynamic merchandising.

Together or singly, these areas offer opportunities for lower costs, higher efficiency, new and larger markets and improved competitive status.

The challenge of materials

By far the biggest challenge is that brought about by the introduction of new and improved materials. In the past year there have been at least six major developments in the film field and significant progress in paper, paperboard, plastics and metals.

Films. Never before in packaging has there been so much happening where films are concerned. The



COLOR PLATES DU PONT

THE CHALLENGE OF MATERIALS

This offers an opportunity both to evaluate the host of new materials and to upgrade the quality of the old. Here a chemist is seeking new compositions of matter out of which will eventually come compounds, unknown in nature, which may form new packaging materials.

choice is widening rapidly and becoming more complex. Cost relationships are undergoing far-reaching shifts. Polyethylene, for example, is now established as the lowest-cost, transparent, heat-sealable film and progress is being made on the problems of handling it—as well as other thermoplastic films—on the high-speed wrapping and other machines needed for such mass products as bread, candy and cigarettes.

The higher-density polyethylenes present an immense challenge. High-density polyethylene in a 1-mil gauge costs about 2.6 cents for 1,000 sq. in. Conventional polyethylene in 1-mil thickness is only 1.9 cents. Costwise, because of gauge-performance factors, high-density polyethylene may very well challenge conventional polyethylene. How this new film can be used advantageously will be one of the most intriguing packaging questions to be faced this year. The challenge is evident in the advantages already established in the laboratory for high-density polyethylene over conventional film: wider in-use temperature range; excellent clarity; improved resistance to moisture, grease and oil; greater stiffness for machine-handling ease—and in some cases, straight-tearing, built-in opening characteristics.[1]

Higher densities in polyethylene do pose some disadvantages. In its present forms, tear and impact strength generally decrease with an increase in density. And the newer polyethylenes present packagers with a bewildering hurdle of processing terms and individual producer interpretations—although an industry standard to simplify this problem is now on the way.[2] In addition to density desig-

[1] See "Polyethylene Progress," MODERN PACKAGING, Aug., 1958, p. 75.
[2] See "Polyethylene Standard Takes Shape," MODERN PACKAGING, Dec., 1958, p. 98.

nations, there are the important factors of molecular-weight distribution, melt index, stress-crack resistance, linearity and the like.

For the next year, and probably for some time beyond—and despite the efforts at standardization—the new technical language of polyethylene will be quite a problem for packagers. This is especially true because the processing terminology is difficult to relate to the simple questions of stiffness, toughness, barrier properties and heat sealability, with which the packager is concerned.

Polyethylene film is being improved by new methods of producing films. There is a trend toward methods which extrude a flat web of film from a slot die onto a chilled roll (casting) or into a cold-water bath. In both cases, the result is fast chilling, which appears to improve clarity, gloss and similar surface properties. Chilled extrusion is unlikely to supplant the blown-extrusion method which is so widely used for conventional polyethylene, but it does lend itself to the manufacture of thin gauges and it means that the packager will have a wider choice of film characteristics. In fact, "polyethylene tailored to your needs" will be one of packaging's new dimensions from now on.

Packaging opportunities also stem from the advantages offered by bi-oriented polystyrene film: new grades of polyester, saran, Pliofilm, nylon and fluorocarbon film, and improved water-soluble polyvinyl acetate (PVA) film.

The new polystyrene film is characterized by excellent clarity and sparkle, a very high rating for dimensional stability and very low cost—only 2.4 cents per 1,000 sq. in. in 1-mil gauge, which is even less than the cost (2.6 cents) of 1-mil high-density polyethylene. Polystyrene film's properties make it ideal for windows in cartons and bags and also as a simple overwrap material. It is well suited to certain packaging requirements of foods, paper products and the like. A limitation is the fact that heat-sealable grades are not as yet available. But suitable coatings are currently being sought which, it is hoped, will solve this problem. Metalized polystyrene film should soon be available, too.[3]

Polyester of differing types is now being offered by three producers. Types and grades have been extended to include heat-sealable film, shrinkable films and one grade designed for stretch lamination. The increasing interest in cook-in-pouch packaging is one of the areas in which polyester's toughness and high in-use temperature range will be exploited to good advantage in packaging.

A development to watch in 1959 is the introduction of polypropylene film. This transparent, heat-sealable film is similar to polyethylene both in its petrochemical origin and in many of its properties. It is a strong film; its physical properties are comparable to those of low-density polyethylene. Its stiffness and barrier properties approach those of high-density polyethylene—thus polypropylene may offer some of the best qualities of both low- and high-density polyethylene.[4] Its in-use temperature range is above boiling and well below zero. A standard type is coming out at about the same cost as MS cellophane. Here is a point to keep in mind—its yield is 32,000 sq. in. per pound in 1-mil gauge and is the highest yield of any packaging film.

At this writing, FDA acceptance of stabilizers for certain food grades of polypropylene is being sought: acceptance, of course, is critical to the importance and growth of these grades.

Cellophanes are not to be overlooked in the midst of the many film developments. These long-perfected and most machinable of all heat-sealable, transparent films provide the standard of economy and performance against which new films are measured. Three new specialized types of cellophanes were introduced for meat packaging in 1958. The polymer-coated cellophanes have become increasingly important, both in the saran and polyethylene-coated types.

Packagers will use more of these coated cellophanes in 1959 despite the approximately 17-cents-per-pound premium carried. The reason: competitive pressures and retailer-customer demands.

While it is hazardous to predict, the present activities of at least two large U.S. suppliers indicate that non-plasticized polyvinyl chloride film and sheet—already important in Europe—should reach the packaging market here during 1959. Non-plasticized PVC has many interesting qualities, including low cost and unquestionable suitability for food products.

In weighing the potential of all of these films, packagers are wisely considering over-all performance as well as price per pound.

The film situation is well summarized in these words from one authority:

"With packaging materials numerous and in free supply, we believe that in 1959 and future years evaluation will continue to become more critical and more discerning. Packagers will look more at final results; less attention will be given to isolated characteristics of materials.

"As they follow this approach, packages will be better and, in the end, less expensive."

Paper and paperboards. Where there is paper, there will always be packages. But paper is not relying merely on its existing advantages. Paper and paperboard, stirred no doubt by the challenge of

[3] See Polystyrene Films in Use," MODERN PACKAGING, Sept., 1958, p. 122.

[4] See "Polypropylene Film," p. 113, this issue.

synthetics, are showing new progress. Stretchable paper, introduced last year, offers excellent opportunities for economies or improved packaging performance, or both. Multiwall bags are the first containers to use this material to advantage. But there are many other applications that deserve investigation—as an overwrap, as a liner or facing of corrugated and solid-fibre shipping containers, and as a basic structural member of thermoformed plastic packages.

Improved, finer grades of paperboard are a fact. Superior strength and printability at lower costs challenge every packager to exploit the cost-saving and merchandising opportunities these newer board stocks afford. On-machine coating techniques are being perfected to the extent that you can specify paperboard performance requirements today that were only a "gleam" a year or so ago.

Glueable polyethylene coatings, a 1958 development,[5] are making folding cartons, paper bags and wraps more serviceable, easier to handle on conventional machines and, of course, the base stock is upgraded. The statement was made recently that polyethylene coatings on paper and paperboard will show a growth comparable to the progress of polyethylene films from 1953 to the present. It is predicted that cartons for dairy products, frozen foods and other items will find and adopt new polyethylene-coated boards in 1959.

Also new in 1958 was a moisture-resistant corrugated board, based on impregnation of wax throughout the stock, so amazing in performance that boxes made of it can withstand a water bath for 20 min. without deterioration (see p. 118, this issue). It is being used initially to meet the packaging and shipping requirements of the produce industry, but should be worth consideration for any product where excessive moisture conditions are encountered.

[5] See "The First Glueable Polyethylene Coating," MODERN PACKAGING, Aug., 1958, p. 92.

Saving on shipping is *an important by-product of container lightweighting. Filled shipper for the latest type of 5½-oz. one-way beer bottles (right) is 2½ lbs. lighter than that for previous one-trip bottles. Cubic space requirements are cut 22%, thus reducing materials used in case and saving on shipping and storage space.*

PHOTO BROCKWAY GLASS

Molded and sheet plastics. Just as in film packaging, one of the challenges of plastics in rigid and semi-rigid packaging is cost. But for 10 years and longer, prices of plastic resins have been falling while costs of other materials have risen. By and large, plastics are still higher in cost per pound of base materials than are glass, paperboard or metals. But the price gap is narrowing significantly and fabricating ease, light weight and functional characteristics are swinging the preference to plastics with increasing frequency in selected packaging applications. In several recent cases, plastics have been found to be the lowest-cost material available to do a specific job.[6]

One noteworthy 1958 event was the advent of high-density-polyethylene blown bottles. The material is stronger and more bottles can be produced from a pound of resin. At time of writing, one distributor was quoting $14 less per thousand for plain 8-oz. high-density bottles than for conventional polyethylene bottles.

However, high-density polyethylene bottles are still so new that there is much to be learned about them and the place they will fill in relation to conventional plastic bottles, to lined plastic bottles, and to glass and metal.

Polypropylene is bound to be considered as a material for bottles, closures, aerosol dip tubes and thermoformed sheet packages. Many of its packaging properties appear especially advantageous and again, as in films, economy should be favorable because it has the lowest specific gravity of any commercial plastic.

During 1958, also, we witnessed the first successful blow molding, in Europe, of a bottle made of unplasticized PVC.[7]

Another big challenge for 1959 is the potential for plastic sheet. Blister, skin and other thermoformed packages, despite their growth, are still in their infancy. Thermoformed high-density polyethylene sheet is just at the threshold of commercial application for cook-in-the-package frozen foods and for sterilizable surgical instruments.

Foamed sheet plastics are gaining acceptance. New last year was a low-cost molded tray adopted by Johnson & Johnson for gift sets. Fabrication techniques have been dominant, but forming will offer additional advantages for decoration, weight saving and better protection. Foamed plastics flocked in deep, rich colors are being developed and should offer some of the same advantages that have

[6] See "Plastics for Economy," MODERN PACKAGING, Nov., 1958, p. 93.
[7] See "A New Plastic Bottle," MODERN PACKAGING, Oct., 1958, p. 100.

already made flocked thermoforms so popular.

A rash of new uses indicates that foamed plastics will offer real economies in cost, weight and time in industrial and shipping packaging. For example, these are the advantages gained by a manufacturer who has adopted a foamed plastic shipping container for electric typewriters.

Metals. You can look to aluminum for further great packaging advances this year. The use of this light, bright material in cans is gathering headway. Kraft is using aluminum cans for cheese; Esso, for oil, and Hawaiian Brewing for beer. The start is impressive, but the rate of growth may be slow until the cost gap between tinplate and raw aluminum is further reduced or eliminated. Aluminum cans have recoverable value as scrap, which can help make packaging uses more economical in certain instances.

On the verge is a major move of aluminum aerosol cans, now being made in the United States by an economical Italian one-piece method and which will be used for packaging several big-name, big-market products.

Aluminum as a material has certain fabrication advantages. It is light in weight and naturally is a candidate for certain iron-sensitive products. That's one reason it will be bidding for consideration in the aerosol field.

Advances in fabricating semi-rigid aluminum foil containers now offer more attractive packages, hermetic seals and wider choice of shape and function. Also, new machines have been introduced that fill and close foil containers faster and more efficiently. Unit or portion packaging is an area that can benefit from these gains. In fact, the first smooth-side aluminum foil cup is currently on the way.

THE CHALLENGE IN CONTAINERS

Here the packager can both adapt old and create new forms. Significant new packages include (top to bottom) a polyethylene bread wrap; a high-density rigid polyethylene bottle; foam packaging; food aerosol; king-size flip-top folding carton; thermoformed high-density polyethylene boilable frozen-food container.

The challenge in containers

Of the several container fields that will be most rewarding in the coming months, thermoforms, aerosols and developments in glass call for special attention by package users.

Thermoforms. One of the best new areas for exploitation will be advances in the automatic forming, filling and sealing of blister and skin packs. New automatic equipment has been or is being in-

stalled by big-name marketers of such high-volume items as flashlights, lamps, spark plugs, razor blades and milk-bottle lids. The automation and complete-packaging concept being developed for thermoforming is comparable in speed and efficiency to that which made automatic pouch forming, filling and sealing so successful.

Machines that will form, fill and seal rigid or semi-rigid transparent plastic packages at speeds of 200 a minute are a reality and, in fact, should soon be commonplace. Beyond this, speeds as high as 1,000 units a minute are in sight. The team-up of high-speed forming equipment with polyethylene, polypropylene, polyester and other materials that will withstand freezing and boiling looks extremely promising for food packaging. You can definitely expect further—perhaps revolutionary—developments in this area this year.

Laminations and coatings hold great promise. There are two types of stretchable paper available for further investigation. The vinyl fruit trays introduced last year look good as a labor saver and effective means of achieving better protection and premium-grade status for fruits. Now the principle is being extended to smaller trays, for candy boxes.

There are big opportunities for handling larger-sized items with thermoformed packages. Marketers of toys, sporting goods, appliances, flowers and similar products have scarcely begun to exploit the advantages of tailored-to-order shape, size, visibility and functional convenience afforded by thermoforms. Industrial packagers have good reason to study the cost-saving as well as the protective advantages of thermoforms. Snap packs, slide tracks, hinged containers and dispensing packs are particularly well suited to semi-automatic, short-run, quick-change operations found in many areas of industrial packaging.

PHOTO VISUAL PLANT LAYOUTS

THE CHALLENGE OF ENGINEERING

This poses the problem of achieving maximum production economies and efficiencies through the most practical layout of high-speed high-volume packaging equipment in integrated and automatic lines.

Aerosols. Nitrogen propellants have opened a large new area for pushbutton packaging. The star attraction has been nitrogen-propelled toothpaste, currently being produced at a rate of approximately 30 million units a year and already vying for an estimated 25% or more of the dentifrice market. The growth areas for aerosols are food, pharmaceutical, personal and household products. In the food line, seasoning, flavorings, concentrated coffee and certain specialty foods will be the ones to watch. And certain liquor brands are said to be eying aerosol packaging for bitters, vermouth and other mixes. Nitrogen is pacing many of the new developments because it is inert, insoluble and most economical—a penny's worth of nitrogen will charge about sixty 6-oz. aerosols.

New valves are coming on the market that will permit opening up and washing of the valve orifice—a desirable sanitary feature for food and drug products. A new large-quantity metering valve (½ to 1 teaspoon and higher) is now available. It should be of interest for many products ranging from cough syrup to liquid coffee.

As for production, aerosol equipment is available to meet any present need. A new rotary gassing-machine installation is said to be running at 250 cans a minute. Several contract packagers have expanded and improved their facilities in anticipation of needs that will be occasioned by new aerosol food, pharmaceutical and personal products that are on the way. The aerosol-packaging field is expected to reach a billion units by 1960.

Glass. The major container developments here are in the renewed trend to lightweighting and in coatings, decoration and styling. Watch the new sawed-off 5½-oz. throw-away beer bottle—economical of materials and a real saver of weight and shipping and storage space; it is a forerunner of lightweighting moves in other standard glass containers. A new semi-permanent coating for glass has just been announced and there is a new plastic decorative color coating employing an epoxy-resin base. Advantages, reportedly, will be unlimited variety of opaque and translucent colors, plus practicality for short runs. This cold-color system will benefit packagers of cosmetics and toiletries. Uses are also foreseen in the packaging of liquors and certain specialty foods. This new decorative method will bear watching to determine what effect the coating has on container strength. Exciting potentials for glass aerosols, and for further lightweighting gains, may be in store for users of glass packaging.

The high styling of glass containers—as seen in Sucaryl sweetener, various vitamin bottles and ketchup and mustard bottles—discloses one of the best sales tonics that packagers discovered last year.

Molded foam plastics, *no longer a novelty, do workhorse jobs. Typical is this 3½-lb. molded polystyrene pack just adopted as standard shipper for 47-lb. Royal typewriter. It weighs about one-third as much as the previous reinforced-board container. The machine is simply placed in the lower half and the two halves are bound together with steel bands. This shock-absorbent shipper is reportedly waterproof and dustproof. Molded container by Worcester Molded Plastics, Worcester, Mass., using expanding polystyrene by Koppers Co., Inc., Pittsburgh.*

In the same category is the lug-top vacuum closure—a significant advance in glass-packaging appearance as well as performance.

The challenge of engineering

Packaging, probably more so than any other field, has immense opportunities this year to take advantage of production-line economies and efficiencies through better engineering.

At the center of the engineering challenge will be use of the new materials previously discussed, as well as the new machinery.

In response to the engineering challenge, every leading manufacturer of wrapping equipment last year announced models designed for handling polyethylene film. And Diamond Walnut's adaptation of standard high-speed pouch forming, filling and sealing equipment to the handling of saran film on a big scale was an important achievement.

Other new machines representing gains for the packaging production line include a pressure-sensitive labeler, end-loading can casers that permit board savings of 15 to 20%, a coil-fed bottom stapler that cuts stapling time in half, a high-speed aerosol gasser capable of 250 or more cans a minute and the high-speed continuous thermoforming machines previously mentioned.

The potential savings that these and similar machines make possible range up to many thousands of dollars for individual users and reach an over-all total of uncounted millions.

Advances in handling, protection and cost protection appeared in great variety last year. For example, there was the foam-cored shipper, used for flowers and now being adopted for produce and nitric acid. It insulates, cushions and keeps out moisture, and thus spells opportunity. So does the poly-

ethylene shipping bag which can be stored outdoors and which has recoverable scrap value.

The economies of diagonal casing—4.6% reduction in container cube and up to 4,000 sq. ft. of boxboard per product carload—represent a challenge from the Quartermaster Corps to other packaging engineers. Other advances include the work-saving self-sealing shipper, the polyester-laminated shipper that can be washed down for cost-saving re-use; a two-piece box set up from a single blank; wrapped lumber; furniture in corrugated; ceramic art ware immobilized for shipment by a polyethylene skin pack and the use of polyethylene liners to give produce up to a month longer marketing life.

Gas sterilization, as a packaging technique, made significant progress last year.

A new method of marking plastic bottles with roll-fed heat-release transfers saves up to 75% in the cost of multicolor decoration.

Seagrams has unveiled a giant operation in which package supplies move from unloading to finished-goods shipment in but 20 minutes.

Gerber Products has taken the wraps off an integrated glass-handling line operating at 600 baby-food jars a minute and built for a designed potential of 1,200 jars a minute. In this machine-gun-fast line, glass never touches glass from the unscrambling stage to the final jar-capping operation.

The challenge of merchandising

Many of the brightest merchandising successes of the year just past could be traced to a few basic all-important packaging skills:

1. Expert knowledge of materials.
2. Versatility in selecting and using containers.
3. Alertness in developing and adopting engineering advances.
4. Skill in anticipating [*Continued on page 179*]

THE CHALLENGE OF MERCHANDISING

This area offers victory at the check-out counter for packagers who capitalize on such package-merchandising skills as anticipation of dealer and consumer needs, outpacing of competitors' packages and thorough research, planning and new-package testing designed to reveal consumer preferences.

PHOTO GRAND UNION STORES

Fish in film

Los Angeles marketer records its biggest volume by switching from bulk selling to transparent-film bags with complementary color designs for its line of smoked and pickled fish products

Brand identity *is a major benefit realized by Los Angeles Smoking & Curing Co. since adopting film bags for its line of fish. Transparent bags also are protective, easy to display and convenient to handle. Color-printed borders upgrade appetite appeal.*

Vial-filling machine *was adapted by* LASCCO *to facilitate the rapid production of pickled-herring packages. The unit dispenses pre-measured amounts of brine into open ends of filled bags, which are then sealed and case packed.*

If the happy experience of one big West Coast producer is any criterion, the tradition of marketing smoked fish from bulk containers is another time-honored merchandising method which appears to be heading straight for oblivion.

The company is the Los Angeles Smoking & Curing Co., which is enjoying its biggest sales in history since switching from no package at all to attractively designed, convenient, transparent film bags for its variety of smoked fish. Two random examples prove the point. In just six months, sales of packaged cod have exceeded the entire previous year's volume for the same item sold in bulk. And another product formerly sold at a price loss now is a prime profit maker.

When the company (known in its marketing area as LASCCO) decided to package its fish products, two considerations were involved. First, even though over-all sales were good, management realized that many potential sales were being lost simply because customers often were reluctant to ask clerks for a product they did not recognize when it was displayed on a counter or in a showcase. Second, there was an obvious need for [*Continued on page 160*]

SUPPLIES AND SERVICES: Design program by Harry W. Goodwin, 1716 Laurel St., South Pasadena, Calif. Printed film bags by Milprint, Inc., 4200 N. Holton St., Milwaukee 3. Smoked-salmon cartons by Marathon Div., American Can Co., Menasha, Wis. Film pouches by Modern Packages, 4500 Dunham St., Los Angeles. "Filamatic" vial-filling machine by National Instrument Co., 2701 Rockwood Ave., Baltimore 15.

2,000 self-selection fixtures *have been installed in stores across the country, designed for merchandising Schrank's packaged sleepwear. Full-color photographic reproductions at top of the unit may be changed to illustrate styles of packaged merchandise stocked in the fixture.*

Million-dollar pajama package

Big investment puts Schrank sleepwear in strong position, with dual, tear-apart polyethylene bags to promote multiple sales; pictorial inserts that discourage opening the bag; pre-ticketing, and permanent self-sell displays

For years the problem of packaging an extensive line of ready-to-wear fashion merchandise involving numerous styles, colors and sizes was thought to be insurmountable, despite obvious advantages and economies in packaged units for self selection.

Retailers objected to transparent film packages that had to be torn open when customers wanted to examine contents for style or try-on. Unsealed packages gave shoppers too much opportunity to remove and unfold contents, wasting sales-people's time to re-arrange.

An impressive example of the techniques that soft-goods manufacturers are adopting today to overcome these difficulties and to step up unit sales is revealed by the 1959 over-all packaging program of the M. C. Schrank Co., New York, recognized as the country's largest producer of woven sleepwear for women.

Schrank, which with its "Pajama Party" theme promotions has built up a nation-wide demand for fashion selections in sleepwear, now announces that it is first in its industry to offer complete packaging of its entire line—a total of some 600 different items when the whole range of styles, colors and sizes is considered. The project, which the company says represents an investment estimated at upwards of $1 million, has several facets of interest to all manufacturers who have the problem of packaging a wide line of fashion merchandise.

The five-point plan capitalizes on every phase of new packaging that has been carefully worked out to help the retailer sell more goods at a better profit and to reduce store overhead. It encompasses (1) specially constructed polyethylene bags, (2) over-all pre-ticketing for price, (3) fully illustrated, printed inserts that give complete style identification, (4) a dual packaging idea to promote the multiple sale of two instead of one item, (5) permanent self-selection fixtures to support the packaging program.

With pre-packaging for certain classic items,

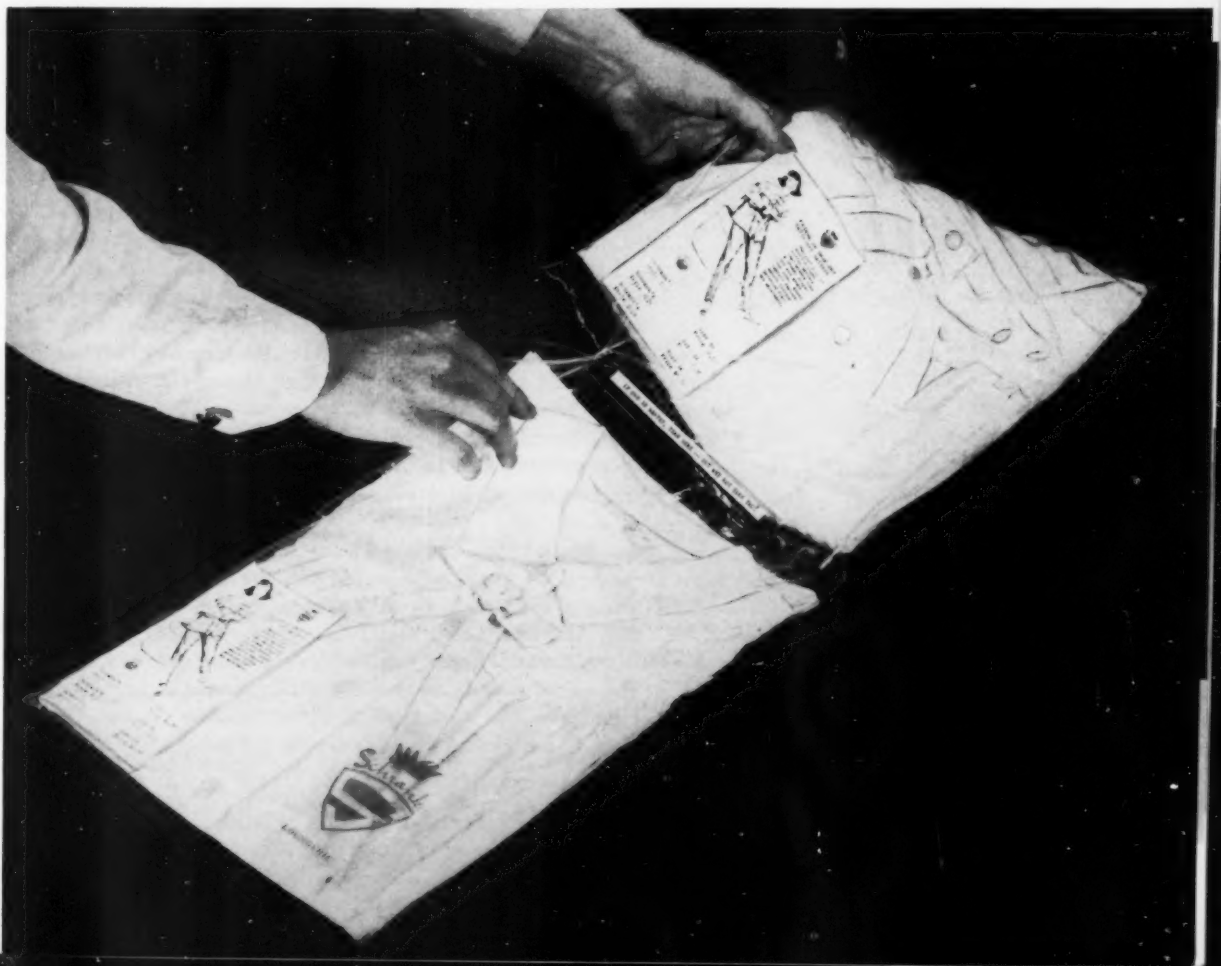
Schrank previously had proved the advantages of transparent film packaging for reducing markdowns due to handling and soiling, and assisting customers to make their own selections. This experience pointed up certain refinements needed for packaging a complete line of fashion merchandise.

Outstanding feature of the program, perhaps, is the adoption of a simple printed insert placed in each package, visible through the transparent film, illustrating the details and appearance of each garment. This procedure, the company believes, will reduce to a minimum the need for opening the packages before purchase, even though the new polyethylene bags have open ends through which contents may be removed for customer examination and try-on, if requested. A shopper is much less apt to remove a garment from a [*Continued on page 170*]

SUPPLIES AND SERVICES: Polyethylene bags by Carnation Converters, Inc., 24-19 45 St., Long Island City, N. Y., using polyethylene film made by Plastic Horizons, Inc., Paterson, N. J. Inserts printed by Cowan Printers, Bridgeton, N. J.

Pictorial insert *in each package is outstanding feature of the program. At a glance, shopper can see just how the garment appears on the figure without removing it from the package. Insert also gives price, fabric information, washing instructions and size. Trademark printed on the polyethylene assures brand identity. Insert also permits bags to be used interchangeably for packaging many different items.*

Dual construction *of bags—actually two packages in one—is calculated to promote multiple sales. Printed strip suggests, "If one is wanted, tear here—but why not take two?" Perforation is provided for separation if customer decides to take only one.*



GREAT
PACKAGING
DISCOVERIES

THIS MONTH'S COVER STORY

Moistureproof cellophane

The chemists and technicians who created moistureproof cellophane in an upstate New York laboratory some 30 years ago sensed that they were pioneering in packaging. Their objective was as clear as the material they perfected. By making plain cellophane impervious to water vapor, they were to transform what was then a glamorous material, but with limited uses, into a practical protective film for packaging. Eighteen months and $250,000 later they triumphantly held up to the light a sheet of new transparent, flexible material about the size of this page. It was like a window opening on a new day in packaging.

Moistureproof cellophane was a film invented specifically for packaging by E. I. du Pont de Nemours & Co., Inc. It became the symbol and the material of self-service merchandising. Cellophane-wrapped foods and tobacco products rolled out in such variety and volume that a revolution in retail food distribution and marketing literally exploded out of this one research project. The new film overtook many markets long dominated by other materials and opened up markets that had never used flexible wrapping materials. It helped make the public packaging conscious. The costly plain cellophane that in France had wrapped only expensive jewelry and delicate orchids gave way to a versatile successor inexpensive enough to package popcorn for the American mass market.

The scope of this 1927 achievement is now measured in data that unmistakably document it as one of the Great Packaging Discoveries. Contrasted with only one-half million pounds of plain film produced in cellophane's first year here (1924), moistureproof varieties today account for 95% of the 400 million pounds of all cellophane cast annually in the U.S.; 94% of it goes into packaging, three-quarters of it to protect food products. What sold for $2.65 per pound in 1924 before it was first moistureproofed is now a greatly improved film at only 62 cents—an almost universal packaging material that in itself grosses $240 million in sales each year.

The French producers of cellophane had a word for it. They called it "waterproof"—but it wasn't. They meant that, unlike paper, it would not disintegrate in water. The American expectation that it wouldn't let moisture pass through was short lived.

This language mix-up was typical of the almost classic obstacles faced by Du Pont's researchers into moistureproofing. Some of the company's outstanding chemists and technicians said it was impossible to overcome the hygroscopic character of the base material—cellulose. In fact, when Du Pont opened the first U.S. cellophane plant in 1924 next door to the Du Pont Rayon Co. in Buffalo, the parent company was ready to convert the whole project to rayon manufacture if its $866,666.67 investment in a joint operation with the French failed to pay off. The first moistureproof cellophane laboratory was squeezed into a space between two caustic tanks. One lone research chemist was assigned the job of making a miracle.

He was the late Dr. W. Hale Charch, then a 26-year-old organic chemist 18 months out of Ohio State by way of General Motors. Some of his early associates now say that what was accomplished would still be difficult even with today's advanced technology. As it turned out, the discovery lay in combining incompatible materials—nitrocellulose and paraffin wax—with a plasticizer and a resin blending agent and by the use of volatile solvents depositing a 1/20-mil coating on each side of 1-mil cellophane. The wax, key to moistureproofing, is present to the extent of only 8 oz. in one acre of film.

Backing Charch in the face of typical skepticism was the late Dr. E. B. Benger, then chemical director of the new Du Pont Cellophane Co., who refused to give way when plain cellophane wouldn't sell against waxed paper and glassine. Six months after Charch started work alone in January, 1925, he was joined by Karl E. Prindle—now with The Dobeckmun Co.—and gradually by others.

Du Pont had run into a bad trade situation with plain cellophane. The film was brittle, tacky and lumpy, and selling slower than expected. Its few users complained that their cellophane-wrapped knives rusted, their cigars dried.

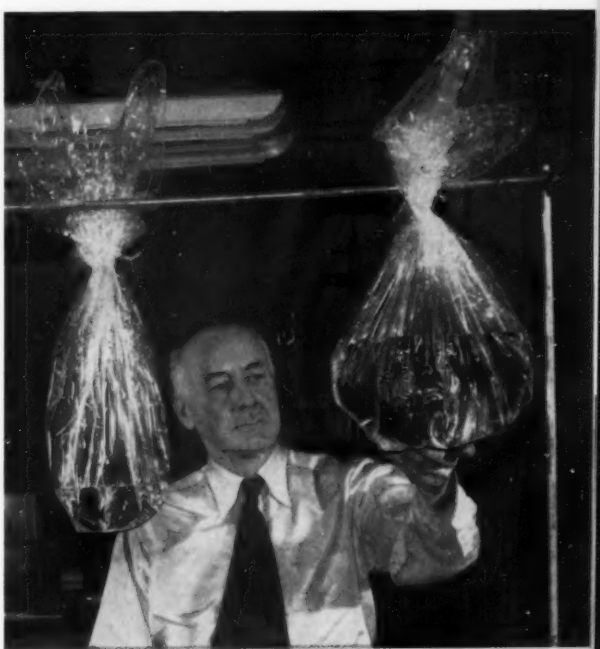
Challenged to save a business, Charch and Prindle investigated several moistureproofing possibilities: a change in the basic cellophane film formula, an impregnation after casting, or a separate coating. Pursuing the latter, they tested more than 2,000 formulations to find a coating that would dry rapidly to a smooth, slick surface, yet preserve cellophane's transparency and flexibility. Prindle recalls that some of the early results were "so bad" that they were strongly urged to try some other angle. "It must have taken a lot of faith and a lot of patience to let us continue."

Research that made plain cellophane impervious to water vapor opened a world of protective film packaging

Finally, they turned out hand-made moistureproof sheets 6 in. wide squeegeed between glass rods. As the process graduated to a 4-ft.-wide film and a 40-ft. drying tower, new problems arose and with each answer came new challenges on which Du Pont continued to invest large sums each year. The wax stopped moisture transmission, but the film became brittle in the heat of the tower. So technicians applied the hot humidity of steam. In high-speed packaging requiring a rugged seal, the coating was found to resist satisfactory adhesion even with the best available solvents. By 1933, more extensive research perfected a heat-sealing coating by modifying the type of nitrocellulose in the original moistureproofing formula, In another serious shortcoming, the coating loosened or flaked off on contact with greasy or wet products. Charch's experiments in anchoring produced in 1934 a practical process using synthetic resins. Yet some moistureproof film, though now anchored and heat sealable, was *too* moistureproof. From research again came new coatings that valved proper rates of water vapor for such products as doughnuts and fresh produce. In all these research achievements other Du Pont departments contributed their technical skills.

Out of such research Du Pont won about 250 patents on cellophane, plus more than 50 obtained from other companies, including Dobeckmun, which pioneered a special process for light heat sealing of cigar tubes. Du Pont's patent on heat sealing followed Sylvania's by a week, but Sylvania (now American Viscose) elected to use the process covered by Du Pont's Hitt patent and was licensed to do so. Today there are more than 100 varieties of cellophane, including more than 60 standard moistureproof types, all the product of teamwork among sales, technical and production men and the chemists who researched and created an "impossible" process.

In 1957 Charch was awarded medals by the American Chemical Society and Columbia University, and Prindle received the Packaging Institute's first Professional Award. Their work is a monument to intelligent and persistent research to solve a basic problem that was holding back packaging progress.



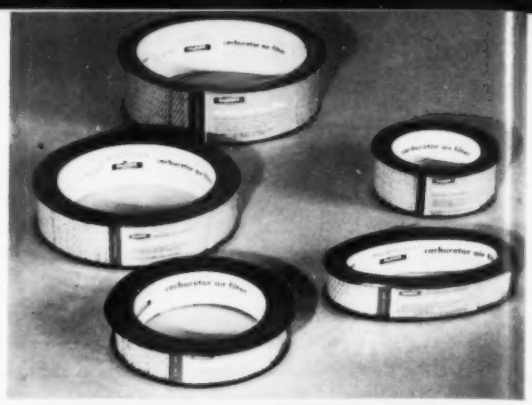
A co-inventor, *the late W. Hale Charch, demonstrates the properties of moistureproof cellophane (right) as compared with plain cellophane (left). With co-inventor Karl E. Prindle, Dr. Charch developed moistureproof cellophane at Du Pont's Buffalo plant in 1927.*

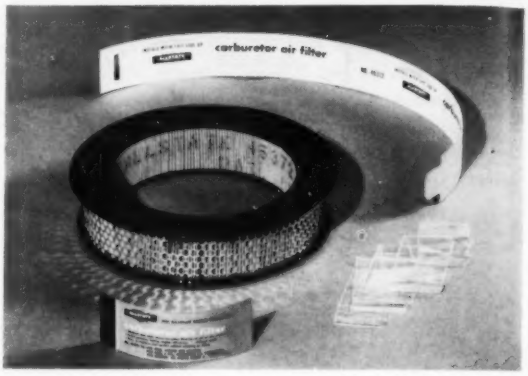
Cost-cutting contour wraps

An 18% saving in packaging costs is reported by Sears, Roebuck & Co., Chicago, since switching from individual boxes to paper, polyethylene-film and chipboard contour-wrapping materials as the retail package for its Allstate line of carburetor air filters for automobiles.

This company's experience also proves again that imaginative package-design thinking, coupled with the greater wealth and variety of packaging materials available today, can add up to sparkling success at the point of sale.

The new "open-style" packaging provides immediate visual identification of product size and type while keeping the filter completely protected from dust, the company says. It consists of a two-color-printed, non-adhesive paper label that fits flush against the wire-mesh surface of the air filter; a strip of transparent polyethylene film that is wrapped around the outside diameter of the filter, then heat sealed for tight, protective fit, and a two-color-printed chipboard band (with tongue-and-slot construction) that is curled into the inside diameter of the product. The band contains instructions for simple installation of the filter.





DESIGN

Foil pouches protect carbonated powder in six-packs

Protective, heat-sealed aluminum-foil pouches that keep Nufizz instant carbonated-beverage powder completely dry and reportedly at full carbonating strength right up to the time of use form the basis of a low-cost six-pack being marketed internationally by Drinks, Inc., New York. The lightweight retail package, designed to resemble a six-pack carrier, consists of a strip of six bottle-shaped pouches in a flat, die-cut paperboard package sealed by pressure-sensitive adhesive. Merchandised in 24-unit counter-display cartons, the carry packs offer substantial shipping economies and eliminate handling of returned empties, the company says.

Protection of the dry powder against the effects of humidity was a critical package requirement. The effective pouch consists of two different heat-sealed sheets. The top layer is 0.002-gauge foil coated with cellulose acetate. The bottom is a lamination of 0.0008-gauge foil, 30-lb. basis-weight tissue paper, 0.00035-gauge foil and a polyethylene coating. *Carriers and display carton by The New Haven Board & Carton Co., 259 East St., New Haven 8. Contract packaging by Mason-Keller Corp., Roseland, N.J.*

Oral-intake aerosol spray

A broad new opportunity for pressure packaging in the toiletries and pharmaceutical industries is opened up by Apex Beauty Products, Belleville, N.J., with its introduction of Maskit breath sweetener in a metered aerosol dispenser. The non-prescription, oral-intake spray is reported to be the first of its kind to use a refrigerant-type liquified gas as the propellant.

The new product is being marketed as a cosmetic accessory (no medicinal properties are claimed for it) in drug and department stores. Package design is calculated to suggest the cosmetic appeal of the spray, whose dispenser is small enough to fit in the purse. The cylindrical metal case —made interchangeably of steel and aluminum—is bright red, with the Maskit name in white. A gold-colored friction-fit brass closure completes the package. *Steel case by Emson Research, Inc., and VCA, Inc., both Bridgeport, Conn. Aluminum case by Peerless Tube Co., Bloomfield, N.J. Brass cap by Metal Fabrications, Inc., Waterbury, Conn. Valve by VCA, Inc. Contract filling by Old Empire, Inc., 865 Mt. Prospect Ave., Newark, using Du Pont's "Freon" propellant.*

HISTORIES

Crown caps for liquor

In what is reported to be the first application of its kind, Jenkins Spirits Corp., Manchester, N.H., is marketing premixed alcoholic beverages in amber glass bottles, crown sealed to hold carbonation. Nine varieties of the 25-proof "Reddy Made" brand drinks—in 8-, 12- and 32-oz. containers —are now being distributed by the company throughout the New England states.

The products include Bourbon and Soda, Whiskey Sour, Screwdriver, Vodka and Tonic, Gin Rickey, Ginger Hi Ball, Gin and Tonic, Tom Collins and Rum 'n Cola. A family-identified paper label on each of the three different-size bottles is printed in red, black and gold on white. The name of the drink is printed in block letters across the top of the label. An oval-shaped shoulder label gives data on the type and amount of liquor contained. A tamperproof, gold-colored aluminum-foil neck sleeve and mandatory Federal tax stamp complete the package. *Bottles by Continental Can Co., Hazel-Atlas Glass Div., Wheeling, W. Va. Crown caps by Consolidated Cork Corp., 4012 Second Ave., Brooklyn 32. Labels by The Libbie Printing Co., Allston, Mass. Aluminum-foil neck sleeves by Reynolds Metals Co., Richmond, Va.*

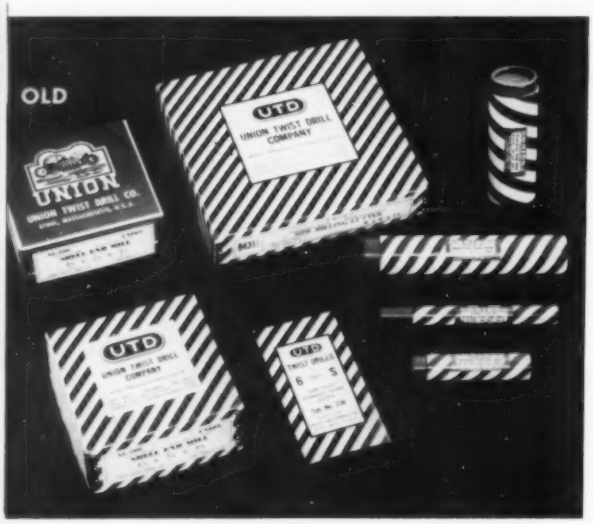
New dress gives mass appeal to an old-time product

Bidding to crack the mass market, Brioschi antacid crystals make their appearance in a square-shouldered glass bottle with an "ethical-appeal" paper label. Available in 10- and 4½-oz. sizes, the bottle represents a radical packaging departure for this 78-year-old Italian remedy, distributed in the U.S. by Ceribelli & Co., Fair Lawn, N.J.

The product was introduced to this country 56 years ago in metal cans and glass bottles. But until the debut of the new container, package and label design had undergone little change. The new square-shouldered bottle was adopted because the crystals have a tendency to settle, which gave the illusion of short measure in the former glass bottles. A redesigned red-and-white-printed paper label gives a modern, more ethical appearance, for stand-out shelf appeal. Sole packaging holdover is the blue-tinted glass. *Design by Lippincott & Margulies, 430 Park Ave., New York 22. Bottle by Maryland Glass Corp., 2147-53 Wicomico St., Baltimore 30. Label by Strawberry-Hill Press, Inc., 23-02 49 Ave., Long Island City, N.Y. Metal lug closure by Crown Cork & Seal Co., 9300 Ashton Rd., Philadelphia 36. Cellulose neck-and-closure seal by The Celon Co., Muscatine, Ia.*

DESIGN

Bright 'consumer design' for industrial tools



Another expression of the trend toward greater brand recognition and family identity among packagers of industrial products is the brilliant red-and-white-striped package design adopted by Union Twist Drill Co., Athol, Mass., for its line of metal-cutting tools. The company markets the products in metal-edge boxes, spiral-wound multi-ply paper tubes and paper envelopes. Prior to the redesign, there was no family relation among the designs for these three package forms. Even more important, the company says, there was little to distinguish them from competitors' packages.

The strongly visual new striped design is being used for the more than 40 different packages in the Union Twist Drill line. In mass display on dealer shelves, the packages form an instantly recognizable, eye-catching family. The design format also has been carried over to all promotional materials. *Box blanks by White Paper Box Co., Athol, Mass. Metal edges by Metal Edge Industries, Barrington, N.J. Envelopes by Carter Rice, Storrs & Bement, 273 Summer St., Boston. Tubes by Stone Paper Tube Co., Div. Stone Straw Co., 900 Franklin St., N.E., Washington 17.*

The intimate approach

A more pleasing approach for women's intimate accessories is the objective of a redesigned line of packages adopted by I. B. Kleinert Rubber Co., New York. And the new cartons, actually produced at lower cost, are increasing sales of such products, the company says. Kleinert's decision to redesign was based on an unusual situation. Although the former windowed cartons effectively showed the product in use, sales reflected the fact that many women objected to the illustration of a partially nude figure. Moreover, product copy was not informative enough, the cartons did not stand out well in self selection and the variety of package sizes required many different display racks.

The new design on each of the uniform-sized cartons illustrates the products by the use of a silhouette figure, made up of a pastel-colored floral pattern. Copy on the face of the carton is brief and informative, with detailed product data on the back. Lower in initial cost than its former line of packages, the uniform cartons also save on shipping-container and display costs, Kleinert says. *Design by Alan Berni & Associates, 580 Fifth Ave., New York 36. Cartons by Trenton Folding Box Co., Ewing & Ogden Sts., Trenton 5.*

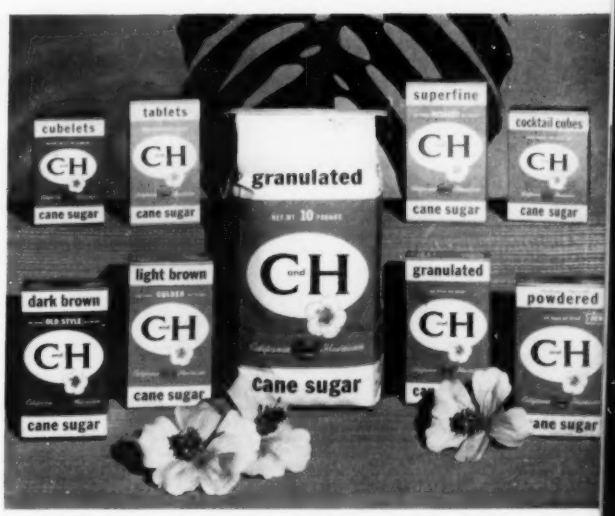
HISTORIES

Color-keyed pastels and a Hawaiian motif

In a complete packaging-redesign program aimed at greater appeal to women, California & Hawaiian Sugar Refining Corp., San Francisco, has adopted a Hawaiian motif and soft pastel background colors for its pour-spout cartons and paper bags of C&H sugar products. According to the company, research showed that the pastel packages (color keyed to help identify the various products in the line) are attractive to women and also offer stand-out visual appeal in mass display.

On each new sugar package, the familiar C&H logo appears in a white oval—a design form indicated by research to have strong recognition and appeal to shoppers—against the color background.

To indicate that Hawaii is the source of C&H cane sugar, an illustration of a hibiscus blossom is printed over the rim of the oval; below it is a sketch of Diamond Head, Hawaii's most famous landmark. Similar Hawaiian design vignettes also appear on the side panels. Recipe copy is printed on the back of each package. *Design by Cornelius Sampson & Associates, 722 Montgomery St., San Francisco.*



Merry sales story

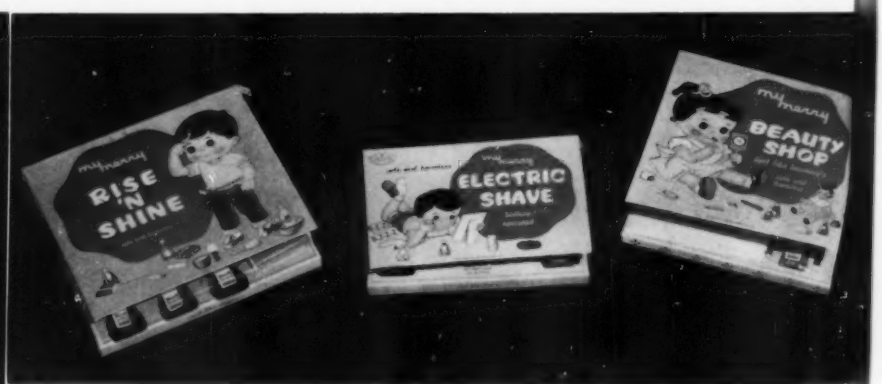
Making the package work in more ways than one is the key to success for this Cincinnati toy manufacturer who in 10 years has multiplied volume 277 times

Unusual testimony to the sales power of effective packaging may be found in the 10-year history of the Merry Mfg. Co., Cincinnati toy maker.

From sales of 36,000 units in 1949, Merry has climbed to 10 million a year—a 277-fold increase—and this expansion is forcing construction of a new and larger factory and headquarters building. Merry's success lies in an appealing product merchandised in practical, utilitarian packaging that in most instances has a dual purpose. Its latest packages not only contain toys, but are part of the game.

Under the "My Merry" brand, Merry makes sets for girls and boys that feature miniatures of soaps, tissues, towels, manicure products and other items that are often real, but child size, versions of actual brands. These are packaged in folding cartons and a few are in hang-up blister cards. The packages hold and protect miniatures of such brand-name packages as Ivory, Dutch Cleanser, Dash and 20 Mule Team Borax and the newest ones are integral parts of the toy, serving as doll "closets" for a nine-item line. All packages are printed in attention-getting four-color related designs.

It is because of such case histories as My Merry toys that the Folding Paper Box Assn. of America will base next year's Folding Carton Contest on the theme, "Front-line marketing with the folding carton." My Merry packages not only won a first prize



Hinged-lid cartons, *now 10 in all, were the original packages used by Merry Manufacturing. All packages in the line have related four-color designs.*

'Closet' cartons *holding child-size versions of every-day products are the newest line introduced by Merry Mfg. Co. Lids double as doors and package partition as "closet" shelves. A transparent film sleeve keeps each of the toys neatly in place and dust free.*

Play value *of doll is enhanced by child's use of the package as a "closet" to store the miniature packages and accessories.*

in the FPBA competition a year ago, but they are examples of sales-oriented packaging that the association wants to single out next year for making significant contributions to the sales effectiveness of a company.

Since Merry's beginning, says President Tony Ach, its rapid growth is due in great measure to packaging. Unique box constructions, distinctive artwork and excellent printing have paid off. Unit volume in the recession-hit first half of 1958 was 6% higher than the same period in 1957. Dollar volume was greater.

The company uses three basic package lines: 10 original items in hinged boxes, nine in the new hinged-closet line and eight blister rack cards. It continually revises its packages. Working closely with its supplier, it has added preprinted, perforated price tags that can be easily torn off; has redesigned the packages to keep pace in the volatile toy market, and has added $1.98 units to the original sets that sold for from 29 cents to $1.

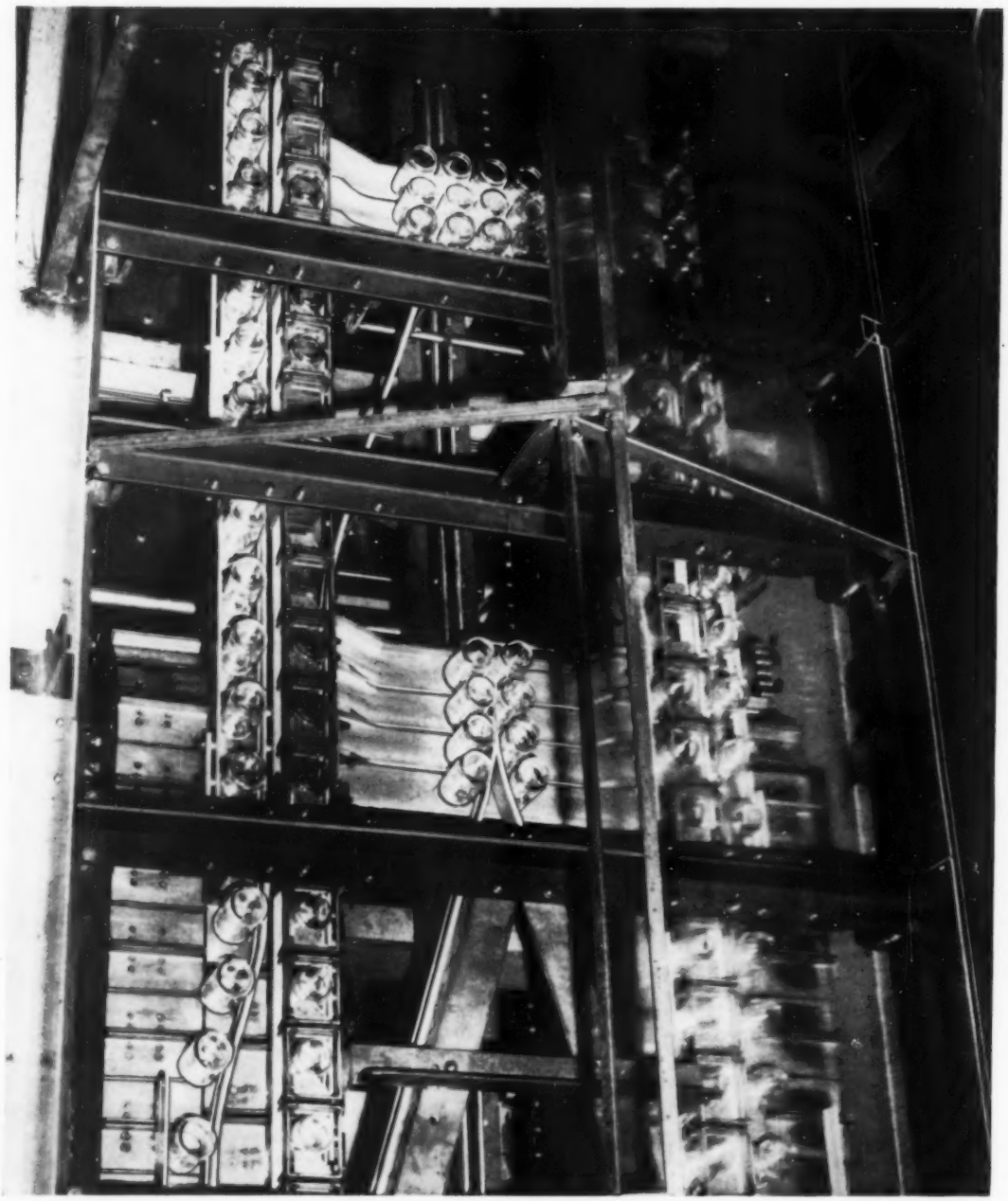
The toys were launched in two-color cartons because their low retail pricing requires that packaging costs be kept to a minimum. But Merry soon learned that the use of more expensive four-color artwork for packages had greater sales value than two-color printing.

Related designs of the three basic lines utilize the same My Merry girl or boy. The hinged-lid and the closet cartons are sleeved with Pliofilm to hold the miniature products in place and keep them dust free.

The closet cartons feature a partial "door" lid that reveals some of the items to stimulate impulse sales. The lid can be opened to support the cartons on counter displays. Package partitions hold the items in neat array until purchase and as built-in "closet shelves" become integral parts of the toy, thus expanding the intrinsic value and useful life of the initial carton.

SUPPLIES AND SERVICES: Carton construction and printing by U. S. Printing & Lithograph Co., 340 Beech St., Cincinnati 12. Pliofilm by Pliofilm Div., Goodyear Tire & Rubber Co., Inc., Akron 16.

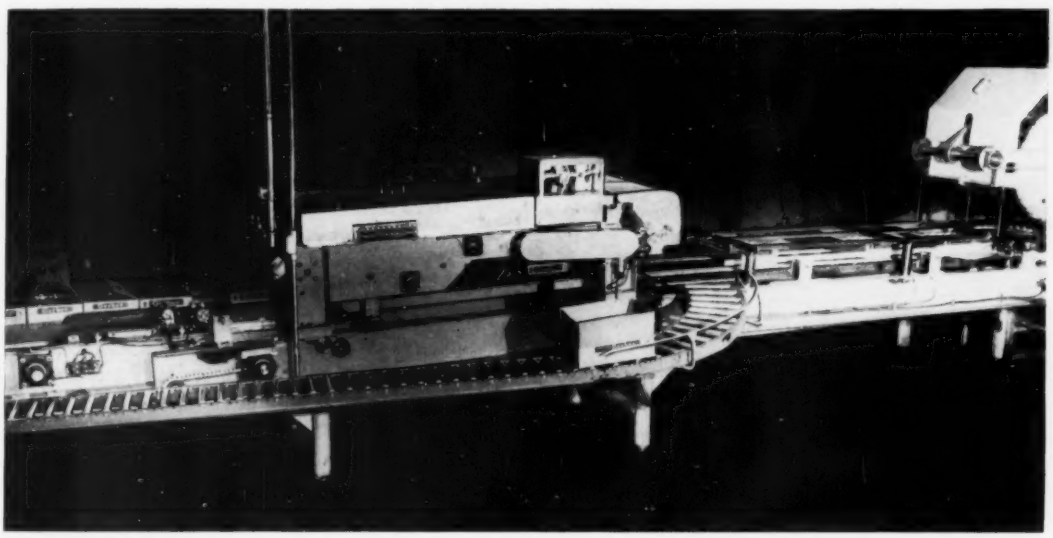
No-contact



No-touch handling *of glass jars is dramatized by movement of these containers in this washing and positioning section of Gerber's integrated feed line, as shown in this overhead photo. V-shaped plows push incoming glass which moves downward in photo from center carriers to enclosed pockets on inner conveyors, located at both right and left. After doubling back for washing underneath the machine, clean glass is swept to outer pockets of the dual conveyors and re-enters, as shown at the top of photo. It is finally swept to a transfer conveyor belt (bottom).*

glass lines

In a triumph of engineering that takes the limit off filling speeds by eliminating contact breakage, Gerber operates a 600-a-minute baby-food jar line in which glass never touches glass



Off to a fast start, *cases of 4-oz. glass jars (from left) enter Gerber's integrated handling line at the rate of about 28 per minute. The hooded machine (center) contains arm and plow mechanisms for opening the cases. Passing over an accumulator belt, the cases enter the unloader at far right. In foreground is a roller return conveyor for shippers that are improperly loaded or opened.*

The problem of on-line breakage, which heretofore has put a limit on high speeds in glass packaging, appears to have been solved at the baby-food plant of Gerber Products Co. in Rochester, N. Y., where two fully integrated, completely automatic lines are now moving at 600 jars per minute each—with potential speed reported to be almost double that speed.

The solution, worked out by the company's own ingenious engineering department, will be closely watched by all who have an interest in high-speed, economical glass packaging. To the food industry, it fills in a big gap in the ultimate plan of having all preparation, processing and packaging of glass-packed foods integrated under economical and completely automatic control.

In principle, the solution is simple: They just don't allow one container to touch another at any point during the continuous race from unscramblers through washing, filling and capping.

Key to this is a combination of (a) mechanical fingers to provide contact-free, vertical movement and (b) compartmented conveyors and belts—one jar to each pocket—to furnish similarly safe horizontal movement. The almost-noiseless equipment represents straight-line automation of what was formerly a partially mechanized plant.

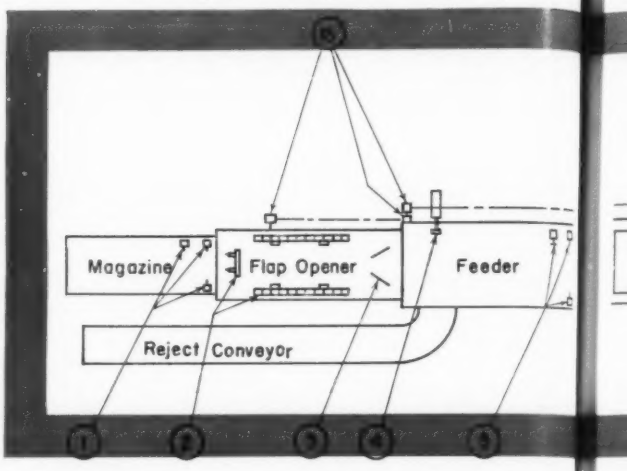
The project was initiated by the company's Engineering Research Dept. at its Oakland, Calif., mechanical research center.

To understand the principle, it is necessary to know something about the physical characteristics of glass. This packaging material is essentially a "fluid," held in form by tough "skins" on the inner

Straight-through operation of

Key to sketch of packaging equipment line

1. Case release mechanism.
2. Back and front flap openers.
3. Side flap opener (plow).
4. Case rejector.
5. Case release mechanism.
6. Line stopping table.
7. Aluminum platen jar conveyor.
8. Washer discharge plows (two).
9. Washer feed plows (six).
10. Pocket washer belts (two).
11. Pocketed transfer belts (two).
12. Combining and accelerating belts (four).
13. Pocketed filler feed belt.
14. Filler feed star.
15. Mitre gear boxes.
16. Timing gear boxes.
17. Hydraulic motors.
18. Planitary gear box.
19. Clutch.
20. Spur gear box at filler drive.
21. Capper gear box.
22. Drive shafts.



and outer surfaces. Jar damage occurs if the skin is scratched or abraded, as commonly happens in uncasing and unscrambling action. And when even a single bottle is broken in food and pharmaceutical operations, a complete and costly shut-down, clean-up and inspection of the packaging line by quality-control personnel is required.

There are seven essential elements in Gerber's integrated line, starting with the case feeder or magazine, flap opener and accumulating conveyor, moving through the case unloader and washer to the single-filer, the filler and capping unit.

For smooth acceleration, the entire line is driven by three hydraulic motors, powered by a central hydraulic pump that normally operates at a discharge oil pressure of about 600 psi. The filler and capper are powered by two of these motors; the third drive is located adjacent to the washer. The three motors and all of the equipment are connected by shafting. These couplings act as drives from the washer back to the magazine and as a low-torque timing device at the front of the line between motors.

Power take-offs from the shafts to the equipment are mainly through mitre-gear boxes. While over-all speed of the line is instantaneously governed by varying the oil pressure at the hydraulic pump, fine timing of individual machines is made possible by three adjustable gear boxes, located at the washer and between the first and second and the second and third motors. A clutch located behind the filler in the drive system permits the filler and capper to run independently of other equipment during clean-up. Start-stop operation of the entire line is controlled by the operator at the filler station.

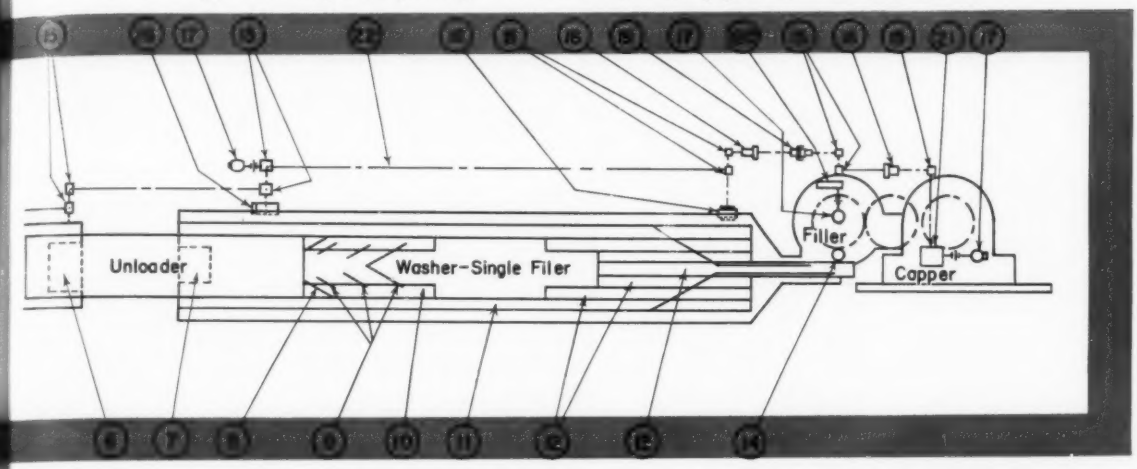
At the start of the line, an operator places cases containing 24 single-tiered jars each right side up—and unopened—on twin belts in the feed or magazine section. From this point, the entire operation is completely automatic and does not require any additional personnel.

An air piston, by actuating squeeze rails which hold or release the cases, controls the flow of cases into the flap-opening section. The back flap on the case is opened by bayonet-pointed rocker arms that pierce the flap and pull it open as the case moves forward. The front flap is opened by chain-driven lugs located at each side of the machine. Side flaps are raised by an air blast, then are plowed open the rest of the way. Flaps are held open by rails.

As each case leaves the opener, a cylinder equipped with 24 arms rolls across its top. If any jar is upside down, or if a flap has failed to open, the hinged roller is forced up, tripping two air cylinders that actuate a third air piston; this piston actually

Uncased jars, *suspended from bulbous rubber fingers (top) are gently deposited on channeled, aluminum platen for transfer to washer. Note spray nozzle (center) for a soap solution that lubricates carriers.*

uncasing, washing and filling line with details of power transmission



pushes the case from the main line onto a roller conveyor that returns it to the initial operator.

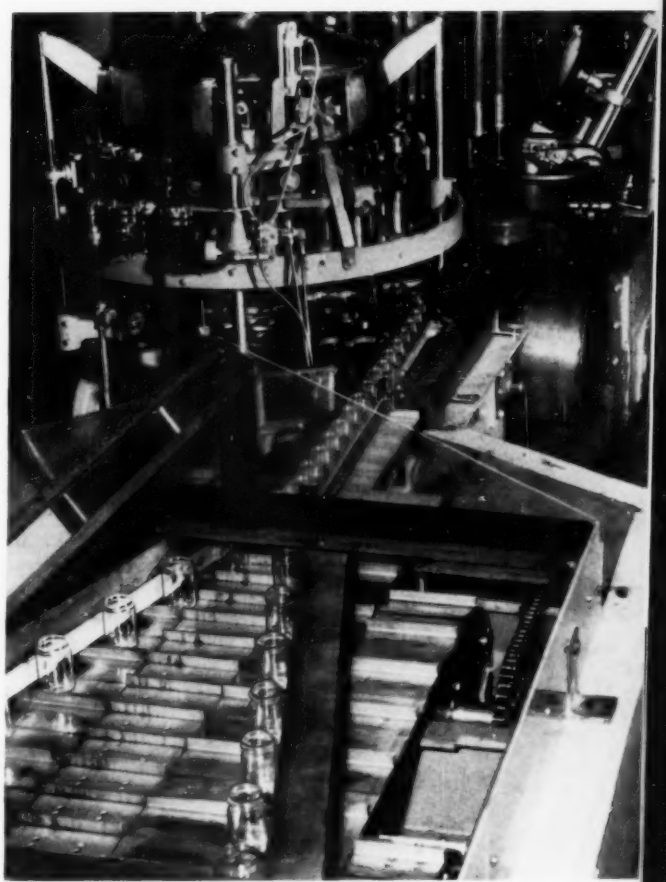
Between the case opener and the unloader machines, there is an accumulating belt. Because the feeder and the accumulator both run faster than subsequent machinery in the line to insure a constant glass feed, a counter compares the number of cases on the accumulator belts and operates the rejection piston when there are more than two extra cases in the accumulator.

In the unloader, another air piston times the cases (and also operates the integrating counter). Heart of this machine, though, is a series of hollow rubber fingers in groups of 24 on chain-driven plates that rotate downward so one finger hangs in each jar. Rods inside each finger are retracted by cam action; this contracts the rubber cylinders and expands their diameter so they grip the jars firmly from the inside.

At this point the case has passed from the accumulating conveyor to a spring-loaded base plate. If case flaps or jars are not in the right position, the fingers depress the case and plate, triggering a switch that stops the line and prevents jams.

As the finger-studded plates are moved by the chain carriers, they pull the encased glass over a void, where rods located between the fingers push down against the divider panels in the case. This removes the case, which falls on a rubber transverse conveyor and is carried to a mezzanine storage area for eventual feeding to [*Continued on page 172*]

SUPPLIES AND SERVICES: "Votator" filler by Girdler Process Equipment Div., Chemetron Corp., Louisville, Ky. Capping machine by Anchor Hocking Glass Corp., Lancaster, O. The other elements in the line are designed and built by Gerber Products Co.



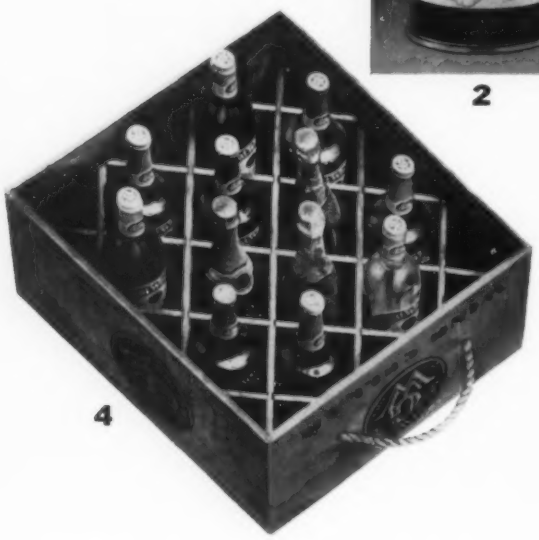
Filling speed *is reached here as jars are swept inward across progressively faster conveyors until the dual lines are combined in the center and reach rate of 660 per minute. A positive star feed (center) prevents containers from rubbing at the filler.*

PACKAGING

1

2

3



4

5

1 Photos of New York Yankee baseball stars lithographed on the crown caps of "Yoo-Hoo" chocolate drink are aimed at starting a new collection fad among youngsters that will spur "Yoo-Hoo" sales. Yogi Berra, Whitey Ford, Bill Skowron, Gil McDougal and Tony Kubek are among the players represented. Copy reads "Me For Yoo-Hoo" and gives the name of the player illustrated. Crowns, Crown Cork & Seal Co., Philadelphia.

2 Add to the list of products now in aerosol containers Chocolate Flavored Syrup by Maison Julien, Inc. This nitrogen-propelled, pressure-packed can is hot filled, needs no refrigeration and has a reported shelf life of two years. Lithographed can, Crown Cork & Seal Co., Philadelphia. Valve, Precision Valve Corp., Yonkers, N. Y.

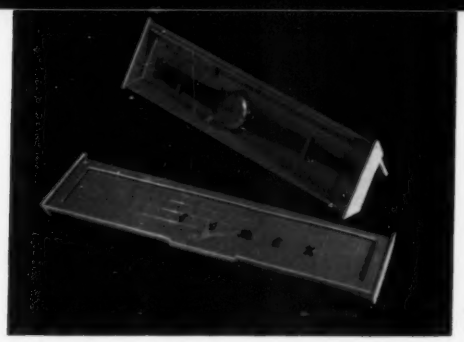
3 West Bend Aluminum Co. achieves product protection for its new Buffet Patio Server set—earthenware casserole, hotplate and six individual servers—with this distinctive display-shipping container. A one-piece box with fold-back lid, it cushions each piece in the set individually to protect it from breakage. Container, Gaylord Container Corp., Div. Crown Zellerbach Corp., St. Louis.

4 Great Western Producers, Inc., is promoting gift sales of a full dozen of assorted wines, including champagne and sparkling burgundy, in a rope-handled wine rack designed in the Continental manner and made of New England white pine. It has re-use value for storage of bottled hard or soft drinks. Rack, J. H. Dunning Corp., Darien, Conn.

5 Easy opening is provided by a serrated edge at the top of this two-ply, 300-gauge moistureproof cellophane bag for Thos. D. Richardson Co.'s new Butter Mints. Gravure printing is in gold, with a window effect for product visibility. Bag, Milprint, Inc., Milwaukee, using Du Pont cellophane.

6 Borrowing a merchandising approach from the phonograph-record industry, Armored Hosiery Div. of Mo-Ro Hosiery Co. uses colorful photographic illustrations resembling those on record albums for

PAGEANT



7

6

8

9

10

packaging its B.V.D. Sox. The sleeves carry eight different designs fine-screen printed on clay-coated board. Sock-shaped die cuts are provided for viewing the product. Sleeves, Continental Can Co., Boxboard & Folding Carton Div., New York.

7 Injection-molded polystyrene gift boxes that double as displays give a de luxe appearance at low cost to Timex watches, popular in the "under $20" field. No fabric lining is required and the watch and strap are retained in position by holders molded into the plastic form. The new box reportedly obtains for Timex show case and window display formerly reserved for jeweled watches. Box, Farrington Mfg. Co., Needham Heights, Mass., using Dow Styron.

8 Top of this key-opening can may be replaced and locked tightly to the can after opening. Small lugs extending from the recessed top fit snugly in the collar of the can to provide tight reclosure. Quaker Oats Co. uses the can for its export cereal products, still retaining for this purpose its original full-length Quaker trademark identity modernized more than 12 years ago for the domestic market. Can, American Can Co., New York.

9 Longer shelf life as well as colorful appetite appeal are provided for Nabisco brand All American Assortment Cookies by this new wrap of cellophane laminated to tissue with a microcrystalline wax. Rotogravure printing is on the reverse side of the cellophane, leaving the outside smooth. Wrap, Marathon, Div. American Can Co., Menasha, Wis.

10 Increased merchandising appeal with reduction in container cost are reported by W. R. Grace & Co.'s Davison Chemical Div. as the result of a redesign of multiwall bags for Davco 3-G Granulated Fertilizer. New horizontal design gives greater area for more effective display. Former expensive outer sheet of printed orange paper has been replaced by a kraft sheet printed in orange and black. Bag, Union Bag-Camp Paper Corp., New York.

11 Customer inspection of paint brushes is encouraged by American Brush Co. with new acetate-window

display carton that has brush handle projecting from a cut-out in the bottom tuck. Tongue in the top closure opens and closes to reveal the bristles as the handle is pushed up and down. Carton, Robertson Paper Box Co., Inc., Montville, Conn., using Celanese acetate.

12 A section of a road map and an automotive theme reproduced on outer carton convey the dual-purpose use of the Shick Auto-Home Powershave electric razor. The three-compartmented presentation case repeats the automotive theme. Design, Francis Blod Design Associates, Inc., New York. Case, Farrington Mfg. Co., Needham Heights, Mass. Printing, The Nevins Co., Clifton, N. J.

13 The problem of loose inserts for warranty and installation instructions that often get lost has been solved for Diller Battery Co. by printing this data on a corrugated shipping carton in a perforated panel that can be torn out after purchase. The procedure reportedly saves 8 cents per battery—the company's estimated former cost of printing and labor to put the former inserts in the package—while the new carton costs only 2 cents more than the previous one. Carton, Marshalltown Container Div., Central Fibre Products Co., Marshalltown, Ia.

14 Three ounces of Lanvin Parfums' toilet water are dispensed through an unmetered valve in this polished brass aerosol container with fluted sides. Center section is polished black anodized aluminum. Container designed by Cartier, Inc., New York, and produced by Scovill Mfg. Co., Waterbury, Conn. Valve, VCA, Inc., Bridgeport, Conn. Bottle, Wheaton Glass Co., Millville, N. J.

15 A new idea in luxury perfume housings is this all-brass hinged box with break-away sides. It combines elegance with practicality for Great Lady, a new fragrance by Parfums Evyan, Inc. The bottle is held in a shockproof position by a clamp form built into the container base.

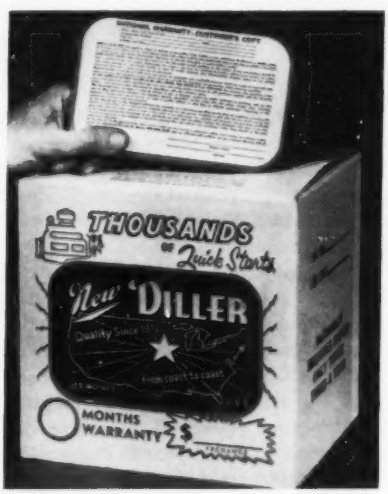
16 Mutual Citrus Products' M.C.P. Low Sugar Pectin, for preparing low-calorie jams and desserts, now comes in a bright, easy-opening pouch with tear string. The tear string is sealed in the material

PACKAGING

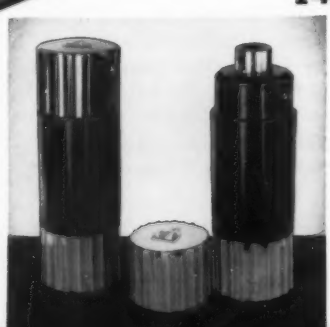
11

12

13



14



15

(reverse-printed acetate, foil, polyethylene) during manufacture and does not hamper packaging operations. "C-Zip" pouch, Western-Waxide Div., Crown Zellerbach Corp., San Leandro, Calif. Custom packing, Los Angeles Custom Packing Co., Los Angeles. Automatic packaging machinery, Bartelt Engineering Co., Rockford, Ill.

17 Protective 4-mil polyethylene bags, reclosable with finger pressure, are said to keep Reeves Soundcraft Corp.'s magnetic recording tape in perfect condition for maximum reproduction qualities. The tape is protected against humidity, dust and dirt, and the bag serves as a permanent storage container for the tape. The bagged tape is shipped in a printed folding carton. "Zip-Lip" bag, Kennedy Car Liner & Bag Co., Inc., Shelbyville, Ind. Carton, Heppe Hudson Co. of Massachusetts, Lowell, Mass.

18 The range of products in thermoformed packages now includes hot-water bottles by Rexall Drug Co.'s Seamless Rubber Div. Formed acetate is heat sealed to a special thermoplastic-coated paperboard measuring 8½ by 16⅞ in. for this hang-up, visibility package which Rexall believes offers distinct merchandising advantages. Board, New Haven Board & Carton Co., New Haven, Conn. Acetate, Celanese Corp. of America, Newark, N. J. Heat-seal machine, Tronomatic Machine Mfg. Co., New York.

19 Greater shelf power and TV appeal—requirements for today's merchandising—have been achieved in restyling the package for Burgermeister Brewing Corp.'s beer. The former brand image has been revitalized without losing its long-established product identity. Design, Walter Landor & Associates, San Francisco. Cans, American Can Co., New York; Crown Cork & Seal Co., Inc., Philadelphia, and National Can Corp., Chicago.

20 H. J. Heinz Co.'s new Hot Ketchup is being distributed nationally in a sleek, specially designed bottle (right in photo) that represents a distinct departure from the familiar bottle for Heinz regular ketchup. Bottle, Armstrong Cork Co., Lancaster, Pa. Cap, Aluminum Co. of America, Pittsburgh. Label, Fuller Label & Box Co., Div. Standard Packaging Corp., Pittsburgh.

PAGEANT

16

17

18

19

20

Owens-Illinois Assures You A Complete Packaging Approach

Continuous Research

Pure research into fabrication of glass, *packaging research* into processing and handling methods in customer plants, *market research* into consumer attitudes. All add up to finer packaging.

Engineered Design

At Owens-Illinois, your package's *three* needs are taken into account: 1) Considerations of its function in the retail store, 2) its operating efficiency, and 3) its consumer utility.

The Right Container

Versatility of facilities and talents make O-I your best source of supply. In container development—beauty, utility, tradition are blended in the right proportions for your product's needs.

The Right Closure

Through long and continuing research O-I has developed the most advanced metal and plastic closures. Helping you choose the right closure is another function of O-I's packaging service.

Needed Fitments

O-I specialists are keenly aware of sales benefits derived from plastic shaker and pour-out fitments which are not "gadgets" but which increase consumer satisfaction with your product.

Merchandising Cartons

Modern cartons developed to serve you efficiently in the retail store and warehouse . . . as well as on your own filling line and in transit. This is the new openized carton with easy-open flaps.

Top your package with eye-catching *"special effects"* colored plastic closures

THESE STRIKING CLOSURES add brilliance to your package . . . help make it a real standout.

Added to their beauty are durability and resistance to most chemicals . . . making them ideal for almost every product.

"Special effects" closures are available in a wide range of solid or multi-colors. They're another part of the Owens-Illinois complete packaging service—the right container . . . attractive label design . . . special fitments . . . and merchandising cartons.

Your Owens-Illinois representative can give you full information of "special effects" and other closures, and the entire O-I packaging service. Make it a point to call him now.

METAL AND PLASTIC CLOSURES
AN (I) PRODUCT

OWENS-ILLINOIS
GENERAL OFFICES · TOLEDO 1, OHIO

Visual impact *of sharply contrasting colors is evident in the new Holloway House frozen-food package, using an intense crimson ("little red house") logo and full-color food photo against a crisp white background. The package also is a new 7-oz. single-portion container. Old package, similarly redesigned, is 14-oz. double-portion size.*

HOLLOWAY HOUSE STEPS OUT

Seven new packaging features, including quick-heating black-bottom aluminum pan, are counted on to put this heat-and-eat brand ahead of competitors

Holloway House, a three-year-old Midwestern competitor among high-quality frozen-food packers, is using seven new packaging features to spearhead a growth campaign designed to plug holes in its national distribution and improve its sales position in this volatile business. By its example, Holloway House shows any manufacturer how packaging features can be employed to boost a product in any highly competitive field.

The seven features that this company is counting on to bear the brunt of its marketing job are:

1. A new package design that sports an intense crimson against a crisp white background.
2. A colorful trademark—"the little red house"—that in its small area continues to carry the only brand designation on the entire face of the package.
3. New product photos from expensive carbro prints to create greater appetite appeal.
4. Single-portion packages (7 oz.) to cater to single persons and childless working couples, but now found to appeal also to suburban families.
5. Black-bottom aluminum pans for single-portion packs that reduce heating time 20%—an innovation and a competitive advantage in merchandising convenience foods.
6. White corrugated shipping containers to con-

note high quality and cleanliness to the retail trade.

7. Tear tapes on the shippers to facilitate opening and so reduce package damage from store-clerks' knives, hooks and hammers.

When this Chicago company decided to scrap its former package, it did so with some trepidation. The old package was well established in many areas. But executives felt it was not suited to the ambitious growth plans which the company hoped to implement.

The old package's pale blue background color was too common. There were dozens of pale blue food packages vying for attention in the nation's freezer cases. While appropriate for the then limited line of Holloway House products, the color wouldn't fit proposed new ones. Among its other faults, the package was too busy and cluttered, and there was no immediate identifiable trademark.

The company was convinced it needed a trademark of sufficient impact to supersede the name and provide instant brand recognition. Most producers of prepared frozen foods today are placing all their emphasis on mouth-watering product pictures. Very few, it is felt, concentrate on trademark effectiveness.

Holloway House wanted good looking food illustrations, but also a trademark which would leap out from the package. Previous packages used a house symbol, but it had not been an integral part of the package design and went almost unnoticed.

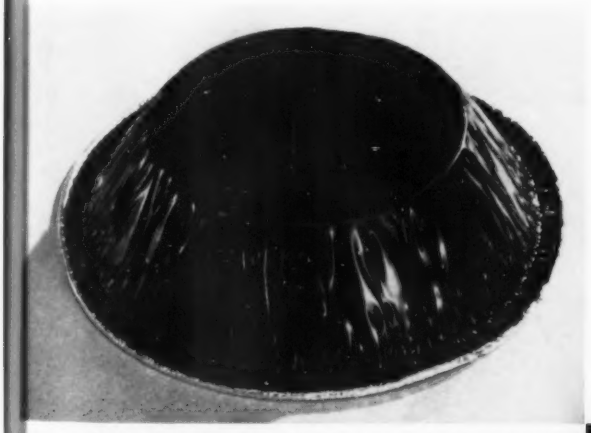
The result is "the little red house." Basically simple, a cross between mid-Victorian and Hansel and Gretel, the symbol is designed to connote warmth and friendliness. Against a crisp white background the trademark stands out sharply. Yet it doesn't overwhelm the product illustration.

The trademark, inside of which the Holloway House name appears in black, is placed prominently at the top left corner of the package. The product name runs underneath—the full width of the carton —while the food illustration occupies the entire lower half.

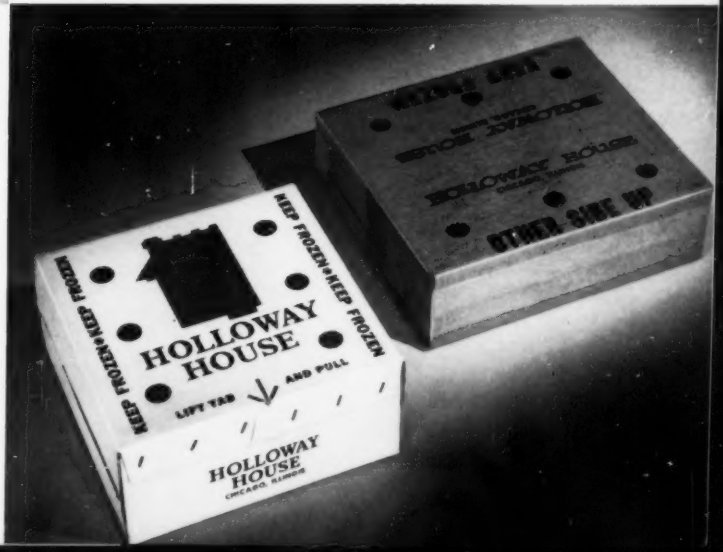
The new 7-oz. single-portion packages contain three of its items—macaroni and beef, au gratin potatoes or macaroni and cheese. The first two are new. Macaroni and cheese will also continue to be marketed in the original 14-oz. size, as will Holloway House stuffed peppers, Swiss steak and stuffed baked potatoes.

A new selling point inside the single-portion package is the black-bottom [*Continued on page 184*]

SUPPLIES AND SERVICES: Single-serving folding cartons of "Hi-fi" board with "Glamakote" finish by Marathon, Div. of American Can Co., Menasha, Wis., and double-serving cartons of solid bleach board with foil-laminated interiors and rotogravure-printed overwrap with "Glamakote" finish also by Marathon. Black-bottom 3-mil aluminum pans by Ekco-Alcoa Containers Inc., Wheeling, Ill. Lidding machine for round aluminum pans also by Ekco-Alcoa. White corrugated shipper by Lanzit Corrugated Box Co., 2445 S. Rockwell St., Chicago. Package design by John B. Penson, 400 W. Madison St., Chicago 6. Carbros by Charles Kuoni, 61 W. Erie St., Chicago. Package consultants, Dennis Triplett & Associates, 400 W. Madison St., Chicago 6.



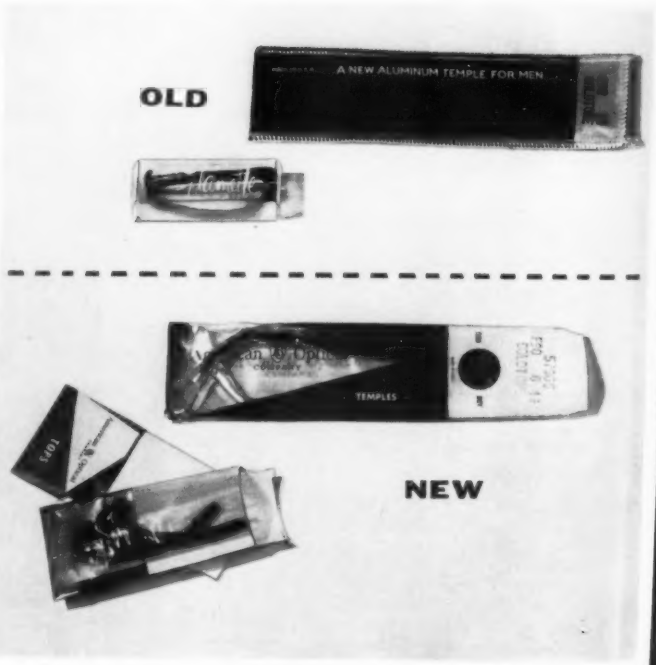
Black-bottom pan *(shown here upside down) is said to reduce heating time 20%. The 3-mil aluminum foil with black vinyl-type coating is a consumer convenience feature designed to create a competitive sales advantage for the 7-oz. package.*



Glamorized shipper *of gleaming white corrugated connotes quality and cleanliness in contrast to drabness of former shipping container (rear). Tear tape on new shipper starts at arrow point. Holes aid freezing after 12 units are packed in each shipper.*

Dynamic design

Adaptability of design *is evident in these applications of American Optical's new white-triangle-on-red-field to any package shape. It now identifies all of the company's 2,000 products. Fibre container and polyethylene squeeze bottle and tubes (left) are for new polishing and cleaning products. Envelope, carton and triangular package (right) are for both messenger and mail delivery of prescription-ground eyeglasses.*



Plastic films *have replaced the former conventional flannel bags and acetate boxes in packages for frame parts, at a saving of 70%. New laminated polyethylene-polyester film bags are preprinted with the red-and-white design, then imprinted with specific identification after packaging. Two stock bags now replace 11 acetate and flannel containers. Note special "Red Dot" screws (for assembling frames) which are securely attached to envelopes with tape.*

for professional line

American Optical gains strong new identity for its 2,000 products while cutting costs as much as 70% by simplifying packaging and reducing inventories

The American Optical Co., a giant in the eyeglass business and until this year a typical traditionalist in the conservative pattern and construction of its packaging, now is converting its 2,000 products to packages with a new look. But aside from a fresh, colorful and uniform package-design identity for an entire line—the point at which many revamping projects end—this Southbridge, Mass., company has switched from conventional packaging materials and forms to economical plastic films and new folding-carton constructions, and from costly preprinting of labels to cost-cutting imprinting of some label information after packaging.

Total estimated annual savings running close to six figures are credited by company officials to such decisions as these:

1. Switching to duplex film bags for eyeglass components at a saving of more than 70% compared with previous packaging.

2. In-plant bag imprinting that eliminates an inventory of 1½ million preprinted labels.

3. Reduction of lens cartons from 250 styles to one, a particularly significant economy because American Optical produces its own cartons.

The simple change to the use of duplex film bags for packaging eyeglass temples (commonly called bows) and tops for eyeglass frames provided the most dramatic savings in the repackaging program.

The temples were formerly enclosed in sewn flannel bags; the tops, in small boxes fabricated of acetate sheet with an acetate divider to prevent the matching parts from scratching. A transparent pressure-sensitive-tape label was applied to one end of the box for product identification. Not only were these packages expensive, but handling and labeling time ran up the cost.

For eyeglass components, the company now has adopted transparent film bags made from polyester (outer) and polyethylene (inner), reducing packaging cost by the estimated 70% plus. The slim temples are enclosed in a film bag measuring 6¾ by 1⅝ in. and the shorter top pieces are put in a similar bag of the same width but only half the length.

These bags are pre-formed from two superimposed pieces of film folded together and sealed with a resin adhesive. The outer polyester layer is printed on the front side, but the [*Continued on page 165*]

SUPPLIES AND SERVICES: Duplex film bags by U. S. Envelope Co., Springfield, Mass. Imprinting machine for bags by Addressograph-Multigraph Corp., 1200 Babbitt Rd., Cleveland 17. Squeeze bottles and fitments by Wheaton Plastics Co., Mays Landing, N. J. Polyethylene tubes by Bradley Container Corp., Div. of American Can Co., Maynard, Mass.

Unified folding cartons *for outdoor glasses, eyeglass cases and lenses (right) now carry the red-and-white design, too. Lens carton (foreground) is a single stock container surprinted with trademark and color coded with a small panel on the top flap as they are filled. Old cartons (left) had 250 different variations of design and presented an enormous inventory problem.*

FRONT

BACK

Pockets in polyethylene

A single sheet of polyethylene film, heat sealed to form 12 individual pockets, is the basis of a "dangling dozen" hang-up, point-of-purchase merchandiser which has been adopted by Jensen Industries, Inc., Forest Park, Ill., for its line of high-fidelity phonograph needles. The pocketed polyethylene sheet, containing 12 different, individually packaged needles, is stapled to a printed hang card. It suggests an effective method of winning preferred in-store position for miniscule products that might otherwise be lost in the shuffle or subjected to pilferage. Sealed on three sides, the polyethylene pockets are open on top to allow easy removal of the carded needles. As each packet is removed from the merchandiser, it reveals the printed word "sold" on the backing card, to remind the dealer to re-stock the display.

Visible from the back of the hang-up display piece for clerk use are diagrams and information telling how to insert the phonograph needle and the type of tone arm for which each needle is intended. *Display by Knox Printing Corp., 2300 N. Knox St., Chicago, using polyethylene supplied by Crystal Tube Corp., 6625 W. Diversey Ave., Chicago 35.*

Display Gallery

Dealer's choice

How can one display piece do a half-dozen selling jobs in as many departments of a supermarket? Albert Ehlers, Inc., Brooklyn, provides one effective answer in the form of a sturdy corrugated floor merchandiser for its line of "gourmet" spice products. Designed for year-around use, the display comes equipped with six interchangeable promotional header boards, two of which are shown. To promote barbecue spices, for example, the lightweight merchandiser can be moved into the meat department and stocked with paprika, garlic salt and similar condiments. The dealer then inserts the appropriate header board, which has die-cut tabs at the bottom that slip easily and securely into slots at the top of the hand-high, stepped-shelf bin section.

For appetite appeal, each of the headers, printed in eight colors, features a tempting reproduction of a food with which the spice can be used. As an added attention getter, die-cut department markers printed with the Ehlers name and the type of spice being promoted are mounted on poles that project above the header boards. *Display by Einson-Freeman Co., Starr & Borden Aves., Long Island City 1, N. Y.*

Better refrigeration

Improved temperature control for refrigerated self-service cases is the objective of a new unit adopted by Tropicana Products, Inc., Bradenton, Fla., to stimulate supermarket sales of its line of chilled fruit juices in waxed-paperboard cartons. The metal-frame refrigerator unit contains four sloping shelves, each holding 64 quart-size containers of orange, grapefruit or apple juice. As the customer removes one carton, another slides down to take its place against the glass face of the shelf. The gravity-feed dispenser is loaded from the rear, to assure "first-in, first-out" sales.

According to the company, its new refrigerated merchandiser was adopted to eliminate product wastage caused by orange-juice deterioration in dairy cases. The unit maintains a steady temperature of 30 deg. F., which, Tropicana says, is ideal for extending the shelf life of juices in cartons.

Promotional copy on the self-selection merchandiser is limited to the company name across the top, a printed "serve-yourself" arrow and product-identification decal strips applied at the top of each glass shelf facing. *Refrigerated merchandiser by Display-O-Matic, Inc., Bradenton, Fla.*

Display Gallery

Counter cold department

Coincidental with the winter sniffles season, Johnson & Johnson, New Brunswick, N. J., is providing druggists across the nation with a vacuum-formed polystyrene self-service counter merchandiser containing a selection of three pediatric products. Designed to serve as an integrated children's cold-remedy department, the compact (9½ in. wide by 12 in. deep by 14 in. high) unit holds six packages each of Liquiprin nose drops for relief of fever and pain, chest-rub stick for local congestion and nose drops and spray for the treatment of nasal congestion. Recessed trays, formed during manufacture of the 26-mil-walled merchandiser, hold the individual packages securely in place.

The display piece is predominantly white, to connote an ethical appeal. Copy on the display's body and riser sections is printed in red and blue for tie-in identification with the over-all J&J line. The riser is attached to a flat polystyrene pole that fits snugly into a slot in the rear of the counter merchandiser's base. *Display by Thomson-Leeds Co., 250 E. 51 St., New York 22, using polystyrene supplied by Auburn Plastics, Inc., Auburn, N. Y.*

When gift pre-wraps, using cartons and printed foil, spread in the liquor field to the most competitively priced, lowest-cost blended whiskies, the distilling industry sat up and took notice.

Even more striking is the thought that a $1-per-bottle domestic wine could (a) stand the added cost of such luxury packaging, or (b) further upgrade itself to the status of an impressive gift. Yet that is just what is being done with a Mogen David wine which made its appearance during the holiday season with beautifully designed four-color-printed foil gift wrap, plus a carton, plus a printed throw-away cellophane overwrap containing the only external brand identification of the company's top-selling American Concord grape wine.

If this expense pays off for Mogen David (and there is every indication so far that it will), it may open wide the gates for decorative gift pre-wraps not only in the wine and beer field, but to every gift-adaptable product that sells for $1—or less.

With many gift-giving occasions in mind, this Chicago winery is going one step farther than do many distillers. While gearing its initial packaging, advertising and sales efforts to meet expected pre-Christmas demand, Mogen David decided to use the gift-wrapped cartons throughout the year.

FOIL PRE-WRAP FOR

COLOR PLATES, CHICAGO CARTON CO.

And to keep the product in its regular price class despite the luxurious wrap, the company reports that increased packaging costs, estimated at 8½ cents a bottle, will not be passed on to wholesaler, retailer or customer.

Among marketing factors leading to this use of a foil-wrapped carton with year-round appeal are:

- Wine is often purchased as a gift and a non-commercial gift-wrapped quart bottle selling in the neighborhood of $1 (or the lower-priced fifth) is expected to have wide appeal, ranging from holiday giving to thank-you gestures.
- An aluminum-foil-wrapped package has such psychological attraction for the customer as to suggest, according to Mogen David, that the product is winery fresh, of high quality, sealed in "metal," tamperproof, clean and dust free.
- The sales appeal of aluminum foil is well documented, the company believes. And because the Mogen David foil wrap carries no copy of any sort, gift wrapping by the customer is not necessary.
- Dealers have an upgraded item ready to merchandise without additional in-store handling and which can be stacked for display purposes.

The gift wrap is four-color gravure-printed 0.00035 aluminum foil laminated to 35-lb. bond

WINE

Success for Mogen David innovation will advance the startling possibility that top-notch gift packaging may be adaptable to any product in the $1 category

PHOTO KAISER ALUMINUM

Cartoning starts *when bottles are moved upright on a conveyor that gently lowers them to a horizontal position. Here, they are pushed into chipboard cartons which are glue sealed on the bottom and tucked on top.*

Non-commercial wrap *(far left) is achieved by customer removal of cellophane sleeve bearing all copy (at right in color illustration). Basic package is an unprinted chipboard carton.*

paper. The laminated web is preprinted by the converter on a seven-station press. First an undercoat of white is printed, then four colors, followed by a varnish overcoat and a heat-sealing coating applied at the last station.

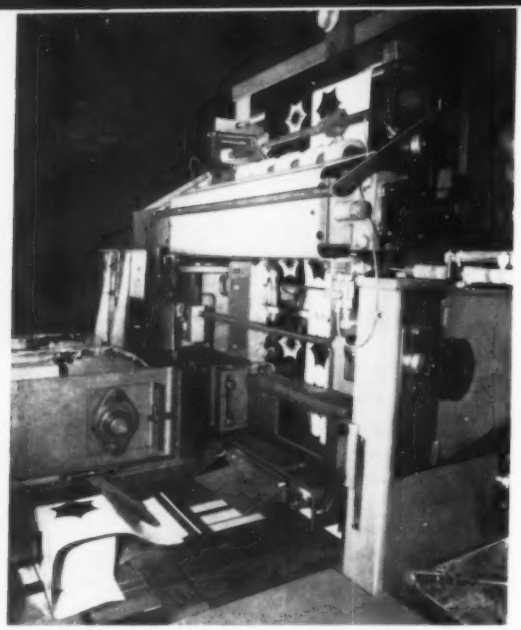
The design, created by the converter's art department, consists of an upper-half band of white and a lower-half band of dark metallic blue. On each of the four vertical panels are two star and sunburst motifs, one each on the white and on the blue. These motifs are printed in alternating color schemes of transparent magenta and gold, with light-blue screen used on the dark-blue lower band.

Between the upper white and lower blue bands and around the star and sunburst patterns, thin areas of the bare aluminum foil are allowed to show through. Thus, with the dark blue, screened light blue and other colors, a six-color effect is achieved.

In addition to brand and company identification, all mandatory federal copy is carried in four colors on the cellophane outer sleeve and at its top is this legend: "Remove cellophane before giving."

The gift-wrapping line is an extension of existing packaging facilities. As filled but unsealed cases of wine are shuttled to the new gift-wrap line, six bottles in each 12-bottle case are removed and placed upright on a conveyor that gently lowers the bottles on their sides before they are fed into an automatic cartoning machine. Meanwhile, the half-filled cases are placed on another conveyor that transports them to the end of the line for final casing and sealing.

The cartoner places each bottle in a 26-pt. chipboard carton with glue-end bottom and tuck-end



Foil wrapping *is accomplished as cartoned bottles continue through packaging equipment in a straight-line operation. Colorful web sheet (middle) is automatically cut off, picked up by carton (bottom) and wrapped around back half of carton by paddles (lower left).*

PHOTOS KAISER ALUMINUM

End closure *and heat seal complete foil-wrapping operation. Moving from right to left, wrapped cartons approach closing and heat-sealing unit on their way to cellophane sleeving.*

top. Cartoned bottles move to the overwrapper that feeds the laminated-foil-and-paper wrap in from roll stock, cuts it to exact size, wraps it around the carton in register and heat seals both ends at 375 deg. F. The cartons travel on a straight-line principle without elevator mechanisms.

A similar wrapping machine places the printed cellophane sleeve around the foil. To facilitate removal of the sleeve by the customer, no cellophane is sealed over the top. The completed gift-wrapped cartons are placed back into shippers and sent through the case sealer.

Although no change has been made on the bottle, cap or label, the cases are newly designed tear-open shippers printed in blue and lavender on eggshell-colored kraft liner. The tear tape is designed to prevent gift-carton damage when the cases are opened.

The unwrapped bottles in each case, sold for the same price as the foil-wrapped ones, are for customers who prefer the bottle by itself.

The project was conceived more than two years ago when it became apparent to the Mogen David management that gift-boxed whiskies fared better in the holiday season than those not gift wrapped.

When holiday sales records of various distillers last January again showed the appeal of gift packaging, the company decided to foil wrap its top seller. More than 250 designs submitted by suppliers, using many types of wraps, were culled and the better ones market tested.

Mogen David engineers then drew up specifications for new packaging equipment and placed orders. By May 10 final design selection was made and orders were placed for packaging materials. In June, foil-wrapped cartons started rolling off the line ready for the holiday rush.

SUPPLIES AND SERVICES: Heat-sealing "Carcolac" foil wrap and design by Chicago Carton Co., 4200 S. Pulaski Ave., Chicago 32, using aluminum foil by Kaiser Aluminum & Chemical Corp., Oakland 12. Chipboard carton by Empire Box Corp. Div., The Ohio Boxboard Co., 17 E. Chestnut St., Chicago 11. Cellophane sleeve by Crystal Tube Corp., 6625 W. Diversey Ave., Chicago 35. Corrugated shipper by Alton Box Board Co., Container Div., Highland, Ill. Cartoning machine by R. A. Jones & Co., Inc., Covington, Ky. "Versaflow" wrapping equipment by Package Machinery Co., East Longmeadow, Mass. "Rapistan" conveyor by Rapids-Standard Co., Inc., Grand Rapids 2.

Packaging components, *all new additions for Mogen David, include chipboard carton in front of blue and lavender shipper with tear tape for protection against knife-opening damage. For customers who don't want gift-wrapped package, half of the bottles in each case are not wrapped (right).*

1958 Report on Knox Glass

by A. W. Wishart, President, Knox Glass, Inc.

The past year has been kind to us at Knox and this report conveys our thanks to you—our customers—for making it so. Also, we hope it will offer an opportunity for some of you, who do not know us as well as we would like, to learn something more about Knox and our constant efforts to furnish quality glass containers and reliable service.

Here are some of the facts about Knox's 1958 progress which may be of interest to you:

1. PLANTS AND FACILITIES: Knox's greatest advance in this area was the August completion of a 105,000 square foot glass container plant at Danielson, Connecticut. This is the first modern glass plant to be located in New England.

Last April, a large amber glass furnace was placed in operation in Palestine, Texas—increasing our local production potential by about 40%.

In addition, our manufacturing facilities at Knox, Pennsylvania, were increased by 50% during 1958; new batch mixing equipment and additional storage space were installed at our Gas City, Indiana, plant; and new and modern mould-making plants were opened in Fairmount, Indiana, and Reno, Penna.

All this means that, as 1959 gets under way, Knox is in a better position to serve you than ever before.

2. SALES: Increases in shipments of Knox glass containers, percentage-wise, during fiscal 1958, once again were considerably greater than the industry average. Sales were up some 13% over 1957 and have averaged an approximate 11% increase annually over the past four years.

Needless to say, this is a trend we hope can be maintained. We are going to continue to do everything in our power to build the finest glass containers available—anywhere.

3. GLASS QUALITY: During 1958, we continued our policy of anticipating the ever increasing national trend to more exacting specifications through the development and application of new quality control systems—in making glass containers, in packing and shipping glass containers, and in delivering glass containers to your plants. This is a continuing program at Knox.

In an expanding company, such as ours, quality control—unless it is studied intelligently and worked at constantly—can quickly become a problem. We are continually studying it and working at it—and this enables us to build containers to your precise requirements. This we consider our greatest asset.

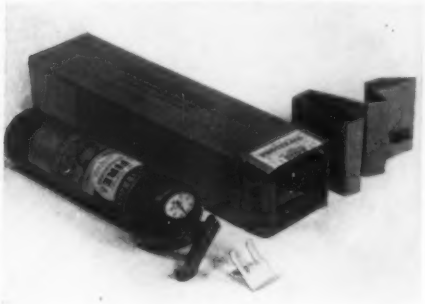
4. CUSTOMER SERVICE: Knox sales offices have now been located in 32 major cities—to provide the kind of services our customers desire. If you would like to meet your nearest sales representative, please write us at our Knox, Pennsylvania, headquarters.

Our plan, and our promise, for 1959, is to continue to add whatever facilities may be necessary to meet your requirements, to improve our sales service to satisfy your growing needs, and to make the finest quality glass containers we know how to make!

the new / **KNOX GLASS**

Vertical display *is afforded this line of round-bottomed home fire extinguishers which cannot stand on their own, by an ingenious bleached corrugated folding carton. Brightly printed and fitted with black inserts, it holds product secure for shipment and, in display, shows off decorator-colored extinguishers.*

Old carton *was sufficiently protective for product, but lacked merchandising appeal.*



Multi-purpose display

Bleached corrugated dispenser answers American LaFrance's need for a rugged container to show four colorful home fire extinguishers at once and at the same time protect them during shipment

How do you make a good retail display of 20 lbs. of home fire extinguishers that won't stand on their own bases? This was the problem facing American LaFrance Corp., Elmira, N.Y., when the company launched a quartet of 5-lb. dry-chemical extinguishers as a new consumer line. The problem was neatly solved by a four-unit display carton constructed of brightly printed bleached corrugated with waxed inserts that can be quickly set up on retail counters.

The new, round-bottom extinguisher is sold in a choice of four colors and is a modification of the company's standard industrial extinguisher packed in a tight, plain corrugated carton.

To show the new colors in a single group, simplify unpacking at the retail store and obtain a vertical display, American LaFrance and a corrugated-box supplier worked out an open-faced display case with a corrugated insert that cradles the extinguishers and accessory wall-mounting brackets in place without hiding them. An outer corrugated carton that completes the unit is removed at the store.

The display carton is printed in gray, red and black. The red is a special ink that prints over the gray base color. After the box is printed, it is sprayed with wax to prevent offsetting and is die cut and reverse scored for set-up. The two die-cut inserts are also made from bleached corrugated stock and are printed a solid black, then sprayed to prevent offsetting on the light-colored extinguishers. This simple background not only separates and supports the four units, but enhances their vivid white, yellow, green and red finishes.

Cost of the original single cartons for the industrial extinguishers was 36 cents for four. While the new four-extinguisher display carton and outer corrugated shipper costs 50.5 cents, the company feels that the difference in price is justified by improved retail display and a 10-fold increase in sales of the product during the first three months of its use.

SUPPLIES AND SERVICES: Display carton by Corning Fibre Box Corp., Corning, N. Y.

another family of prestige products packaged by BURT

CANADA DRY Whiskies and Brandies

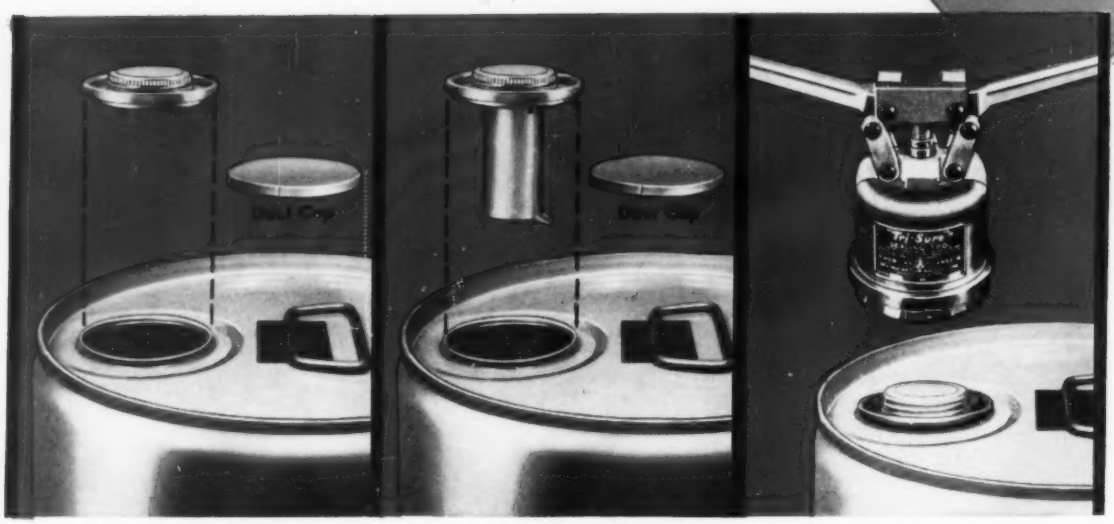
Gift cartons designed by
Raymond Loewy Associates

Gold Leaf: No. 845 Lustrofoil Gold Leaf manufactured by the General Roll Leaf Manufacturing Co., Elmhurst, L. I., N. Y.

F. N. Burt Company, Inc.
Manufacturers of Small Set-Up Boxes, Folding Cartons, Transparent Containers.
500-540 Seneca St., Buffalo, N. Y.
Offices in Principal Cities or Write Direct.
Canadian Division: Dominion Paper Box Co., Ltd., 250 Islington Ave. S., Toronto 18, Canada

Pail fillers

Get all the advantages of *Tri-Sure*® Clinch-On Assemblies at no increase in closure cost



Tri-Sure* 1¾" V-Type Screw Nozzle Assembly

Pails are delivered to the filler with the standard Clinch-On opening (protected by dust cap). After the pails are filled the filler just clinches the complete assembly onto the neck of the pail opening. This assembly is available with screw caps or Upressit† caps.

Tri-Sure 1¾" Self-Venting Pull-Up Spout Assembly

Clinches onto the same standard opening as all Clinch-On Assemblies. Self-venting pull-up spout gives controlled flow without gurgle, sputter or stoppage. This assembly is also available with screw caps or Upressit caps.

Tri-Sure Clinch-On Tool

With this Clinch-On Tool it's easy to clinch these complete assemblies onto the neck of the pail opening, and make a tight, permanent installation. The tool can be used just as easily to install any one of the 23 other Tri-Sure Clinch-On Assemblies.

Instead of paying a premium price to obtain the advantages of this new clinch-on feature, the pail filler can obtain these Tri-Sure 1 3/4" Assemblies at competitive prices.

Send for details now, including information on the full line of Tri-Sure Clinch-on Fittings—25 different assemblies, all applicable to one standard pail opening.

**The "Tri-Sure" Trademark is a mark of reliability backed by over 35 years serving industry.*

†Trademark

AMERICAN FLANGE & MANUFACTURING CO. INC., 30 ROCKEFELLER PLAZA, NEW YORK 20, N. Y.

Technical & Engineering

Charles A. Southwick, Jr., *Technical Editor* Robert J. Kelsey, *Engineering Editor*

Figure 1. *Gloss and transparency of polypropylene film, now being produced in U. S. by special process, are illustrated by these pouch packages. Heat-sealed packages readily withstand boiling or autoclaving. Cost of 1-mil film is below that of moistureproof cellophane.*

Polypropylene film

First report on the packaging properties of a new member of the polyolefin family, comparing its qualities with those of the polyethylenes

*By Bruce M. Miller**

Great strides have been made in the past two years by polyethylene generally, and particularly in the producing and developing of medium- and higher-density polyethylene films (1, 2, 3, 4)[1]. The most recent development in olefin resins is polypropylene, with properties which make it potentially attractive as a packaging film.

Isotactic polypropylene is the first of a new class of alpha-olefin polymers discovered by Giulio Natta of the Milan Polytechnic Institute in 1954. This polymer has a sterically regular structure within the macromolecule and thus is called "isotactic." The main linear head-to-tail chains contain long sequences of tertiary carbon atoms presenting the same steric configuration. This type of stereoisomersion provides the polymer with unforseen properties. It is tough, highly crystalline and has a high melting point.

As a result of new techniques in the film-extrusion field, Ludlow Papers, Inc., had developed a process which has led to the creation of a number of new unsupported films. These films, which have been under evaluation by 23 large consumer-packaging concerns for more than a year, display combinations of many unique properties and characteristics not commonly found in other films utilized in the packaging and other fields at the present time. The films produced by the Ludlow process are from basic thermoplastic resins which have not been blended and therefore are not modifications of one another,

* Development Manager, Plastics Div., Ludlow Papers, Inc., Needham Heights, Mass.

[1] Numbers in parentheses identify References appended.

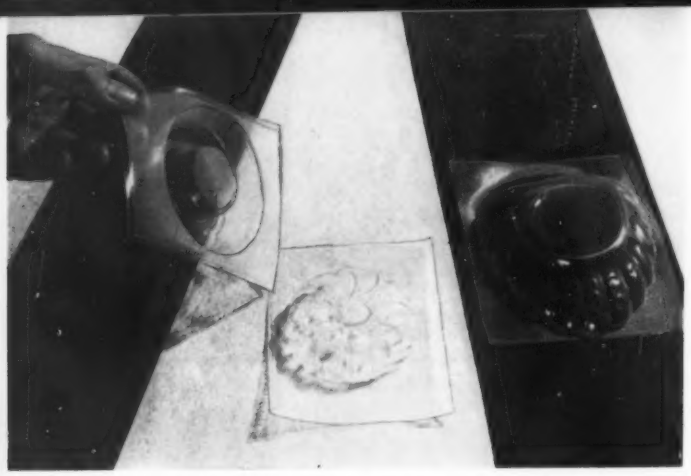


Figure 2. *Toughness and excellent draw-down promise a future for this clear film in skin and blister packaging. These thermoforms are made of 4-mil polypropylene. Note deep draw on thermoform held at left.*

but are individual films, each with its own distinctive properties.[2] One of these is a polypropylene which Ludlow is marketing under the name of Proplene[3], which is based on Hercules Powder Co.'s Pro-Fax polypropylene resin.

Process and costs

Because it is a new resin on the market, the prices of polypropylene resin today are slightly higher than those of the older polyolefin resins. This situation is destined to resolve itself as the volume consumed by the various markets allows for greater efficiencies and volume of production. However, because it has a density lower than that of the other polyolefins, polypropylene gives a greater film yield per pound on a 1-mil basis. This permits Proplene film to be marketed today at a price just slightly above that of the higher-density polyethylene films, but below that of the coated cellophanes, as shown in Table I.

Legal considerations prevent a detailed description of Ludlow's new process for the extrusion of films at this time. However, it may be stated that the process is a combination of new techniques resulting in non-tubular films, which therefore differs significantly from the blown-tubing or other tubular processes known today. With these techniques, polyolefin resins ranging in densities from 0.90 through 0.96 and with melt indices ranging from 0.1 through 22 have been demonstrated to process equally well. In addition, resins normally classified as injection-molding, pipe, paper-coating and wax grades have been extruded into films considered attractive for certain packaging end uses because of properties such as stiffness, high impact, high degree of drawn-down, or softness of hand.

At various stages in the process, steps have been provided to control the crystallinity of the film by several quenching techniques which result in a high level of gloss and clarity. Some measure of orientation in both machine and transverse direction has been achieved in the processing, as attested by comparable tensile strengths observed in both directions. Film from all resins evaluated, independent of density and melt-index range, has been produced in gauges from ¾ mil (0.00075 in.) through 10 mils (0.010 in.) and in widths up to 60 inches.

Polypropylene film produced by the Ludlow process represents, we believe, the first successful commercial conversion of this resin to an unsupported film.

Properties

Table II shows general and mechanical properties of Proplene polypropylene film compared with other polyolefins produced by the blown-tubular process. (The density classifications for the polyethylenes in all of the accompanying tables are in accordance with ASTM D 1248-58T.)

As seen in this table, this polypropylene film exhibits the highest tensile strength of any of the

[2] Properties of Proplene film were determined by independent laboratories.

[3] "PROPLENE" is a trademark applied for by Ludlow Papers, Inc.

Figure 3. *Polypropylene film makes a tough, clear skin package for these tools. It adheres to uncoated board.*

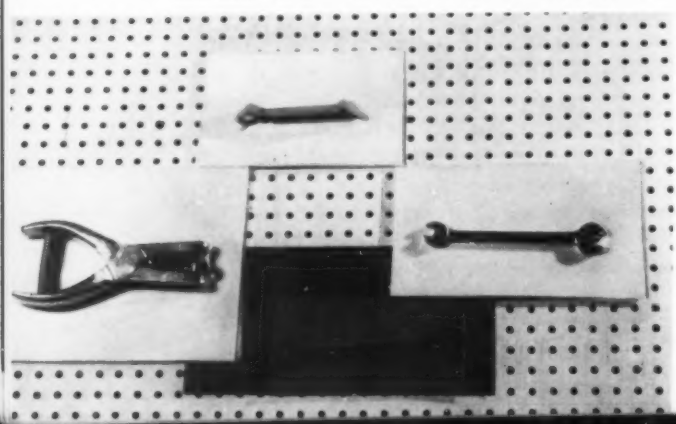


Table I: Approximate costs of Some packaging films per 1,000 sq. in.*

0.001" lower-density polyethylene film	$0.018
0.001" polystyrene film	0.024
0.001" medium-density polyethylene film	0.024
0.001" higher-density polyethylene film	0.026-0.031
0.001" Proplene polypropylene film	0.032
0.001" polyvinyl chloride extruded film	0.036
0.001" 300-MSA cellophane	0.035
0.001" rubber hydrochloride film	0.035
0.001" cellulose acetate cast film	0.042
0.001" polyvinylidene chloride film	0.066
0.001" polyamide film	0.096
0.001" polyester film	0.112

* Based on manufacturers' price lists and MODERN PACKAGING *Encyclopedia Issue* for 1959, p. 127.

polyolefin films and has better impact strength than either the medium- or higher-density types of polyethylenes at 72 deg. F. This combination of properties indicates the film's importance in the bag or overwrap field, where a material is needed to package objects with irregular surfaces, points or sharp corners.

Thermoforming (skin and blister packaging) appears to be one of the most promising end uses for this film because of its toughness and excellent draw-down characteristics. Figure 2 illustrates polypropylene of 4-mil gauge utilized as a skin package. It may readily be observed that the film draws down tightly. It will adhere even to uncoated board (Figure 3). Machine cycling times appear to be similar to those reported for the polyolefins.

A comparison of thermal properties is shown in Table III. It is quite apparent that, like higher-density polyethylenes, this polypropylene film may be boiled or autoclaved. In addition, polypropylene may be utilized at temperatures up to 50 deg. F. higher than is suitable for any other polyolefins listed, including higher-density polyethylene. The heat-sealing range of polypropylene, running from 325 to 400 deg. F., is somewhat higher than that of the polyethylenes.

Polypropylene film exhibits the same low-temperature flexibility as higher-density polyethylene. This characteristic appears significant when compared with the cold-temperature brittleness found when polypropylene is produced in thicker cross sections, as in sheeting, injection-molded articles or blown bottles. The film withstood the lowest temperatures of the cold chamber utilized.

Permeability ratings are shown in Table IV. Proplene polypropylene film, while displaying a water-vapor-transmission rating in the range of a medium-density polyethylene film, offers gas-barrier properties considerably better than those of any of the three types of polyethylene, as will be noted from the table.

Odor-permeation tests were conducted to compare the effectiveness of samples in retaining flavors. The apparatus employed was a Cherepow cell (5). The importance of this test for polyolefins did not become apparent until Proplene film was evaluated (Table IV), since all three types of polyethylene are approximately equal and only about 1/12th as effective as polyproplylene in resistance to odor penetration. The odorous material used in the test consisted of equal parts of white pepper, ground sage, cinnamon and allspice.

Printability of polypropylene film compares with that of the other types of polyolefins, after the film has received the same treatment for ink adhesion. The conventional flame or electronic treating processes have been used and up to three-color printing (green, yellow and white) by the flexographic process has been accomplished on commercial equipment without apparent difficulty. Ink adhesion has been rated excellent in all tests to date.

Table II: General and mechanical properties of 1-mil polyolefin films

	Units	*Test method*	*Lower-density polyethylene*	*Medium-density polyethylene*	*Higher-density polyethylene*	*Proplene polypropylene*
Density	Gms./cc.	Density gradient column	0.910-0.925	0.926-0.940	0.941-0.965	0.90
Tensile strength	P.s.i.	ASTM D882-56T				
MD			2,800	3,100	3,600	7,800
TD			2,000	2,800	3,400	6,600
Elongation	%	D882-56T				
MD			275	225	300	550
TD			450	75	10	400
Tear strength	Gms./mil	Elmendorf				
MD			200	95	16	40
TD			150	80	120	329
Impact strength 72° F.	Ft.lbs.	Falling ball*	0.25	0.11	0.05	0.22

* For this test, a circular specimen, with a 7-in. diameter of test area, was suspended 8 in. above a horizontal platform. A 0.15-lb. steel ball, with an approximate diameter of 1 in., was dropped at increments 2 in. in height onto the center of a new test specimen for each increment until failure was noted.

As mentioned previously, gloss and clarity are two of the outstanding attributes of films produced by the Ludlow process (Figure 1). The gloss of Proplene film has been rated at 96 photovolts in accordance with TAPPI-T480M-51. The per cent haze has been found to be 3% in accordance with ASTM-D 1003-52. These figures make the film comparable in these respects to the moistureproof grades of cellophane on the market today.

It is well known that the polyolefin films as a class exhibit excellent shelf life and polypropylene is no exception. Loss of dimensional stability is only 0.34% over the span from 0 to 150 deg. F. Shrinkage is not a factor when the film is heat sealed.

Maximum and minimum temperatures of polypropylene film give this material a wide latitude in end use. The film will not soften under sterilizing

Figure 4. *Oil resistance of polypropylene film surpasses that of the polyethylenes by a factor of from two to one (for high-density polyethylene) to five to one (for low-density polyethylene).*

Table III: Thermal properties of polyolefins

	Units	*Lower-density polyethylene*	*Medium-density polyethylene*	*Higher-density polyethylene*	*Proplene polypropylene*
Heat distortion temp.	66 lb./sq. in. (° F.)	107-121	135	150-194	190-220
Vicat softening temp.	° F.	175-205	220-235	245-260	280-300
Heat-sealing range	° F.	230-300	230-325	270-350	325-400
Low-temp. flexibility	° F.	<—60	<—70	<—80	<—80

Table IV: Permeability of polyolefin films to vapor, gas and odor

	Units	*Test method*	*Lower-density polyethylene*	*Medium-density polyethylene*	*Higher-density polyethylene*	*Proplene polypropylene*
Water vapor	Gms./100 sq.in./24 hrs./mil/100° F., 90% RH	ASTM E96-53T	1.2	0.7	0.25	0.65
Oxygen	NTP cc./100 sq. in./24hrs./atm./mil/75° F.	*	550	280	125	97
Carbon dioxide	"	*	2,900	990	580	280
Odor	Hrs. to penetration	Cherepow cell	0.17	0.17	0.17	2.00

* According to Cartwright, L. C., *Analytical Chemistry*, Vol. 19, June 1947, p. 393.

procedures, including boiling and autoclaving. The film apparently also may be utilized in freezers because of its low-temperature flexibility, as may the other polyolefins. Environmental stress cracking is not a problem when polypropylene is used.

The oil resistance of polypropylene film greatly surpasses that of low- and high-density polyolefins. When tested with mineral oil at 140 deg. F., lower-density polyethylene of 1.5-mils thickness was penetrated in four days and 1-mil higher-density polyethylene in from four to nine days, while 1-mil polypropylene resisted from 15 to 20 days. This indicates that polypropylene may be a significant packaging film in markets where oils or fats are a factor[4] (Figure 4).

Adaptability to machinery

Although new to the market, Proplene film has already been evaluated on several packaging, overwrap and bag-making machines which have either been modified or built especially to handle thermoplastic films such as polyethylene. Demonstrations have been carried out experimentally and commercially on machines such as:

1. Package Machinery Co.'s FA-2, where 60 boxes per minute were overwrapped with 1-mil Proplene.

2. Battle Creek Packaging Machines, Inc., Model No. 475, where it was demonstrated that 60 to 80 envelope packages could be overwrapped per minute, utilizing 1¼-mil Proplene. Temperatures ranged from 350 to 360 deg. F. at the slower speeds and 390 to 400 deg. F. at the more rapid packaging rates.

Experience to date has been that even though the heat-sealing range is between 325 and 400 deg. F., Proplene heat seals readily, resulting in clean, tight, strong seals with no evidence of deterioration of the film on either side of the seal.

References

1. Kaufmann, K. A., "Higher-Density Polyethylene," MODERN PACKAGING, April, 1957, p. 137.

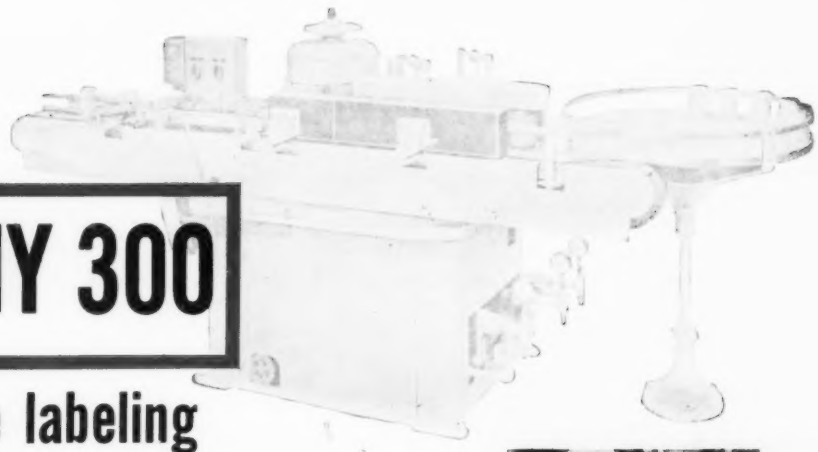
2. Swec, L. F., "High-Density Polyethylene Film for the Packaging Industry," Paper #20 presented at the 14th Annual National Technical Conference, The Society of Plastics Engineers, Detroit, Jan., 1958.

3. Thor, C. J. B., "Polyethylene Films," *The Society of Plastics Engineers Journal*, Feb., 1958, p. 44.

4. Doyle, R., and Martinovich, R. J., "A Polyethylene Overwrap Film," MODERN PACKAGING, May, 1958, p. 215.

5. Cherepow, F. H., "A Method for Comparing the Flavor or Odor Permeability of Flexible Sheet Materials," presented before Packaging Materials Testing Committee, TAPPI, Oct., 1958.

[4] Pro-Fax 6513 is considered by Hercules Powder Co. to be suitable for use in the manufacture of food-packaging materials. Hercules is cooperating with the Federal Food & Drug Administration in studies on Pro-Fax 6513. However, until such studies are completed no representation is made that the FDA deems this material non-objectionable for use in food packaging.



New PONY 300

300-per-minute labeling on any bottling line

The new, completely automatic PONY 300 delivers precision labeling at both the lowest original equipment cost of any labeler in its speed range, and at the lowest change-parts cost.

Perfect register

The PONY 300 uses suction label delivery to assure accurate placement. Its gluing action applies a rolling, all-surface pressure for a tight edge-to-edge bond. The label can't slip or fail to adhere. And this new high-speed labeler banishes seepage. Its micro-glue control constantly safeguards the appearance of your labeled bottles.

"No label—no glue" control

A new, exclusive *electronic index* detects label "failures" instantaneously, even at 300-per-minute speeds . . . makes it impossible for a mouthpiece not covered by a label to receive glue. New Jersey's dependable "no bottle—no label" index provides further protection against dry runs; completely eliminates hit-or-miss operation.

Variable speed control

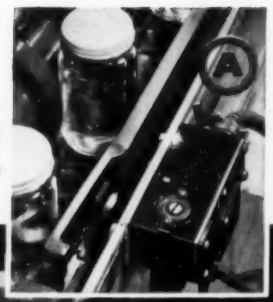
Quick adjustment for production rates anywhere from 60 to 300 bottles per minute, depending upon the needs of your production line.

Fast, easy change-over

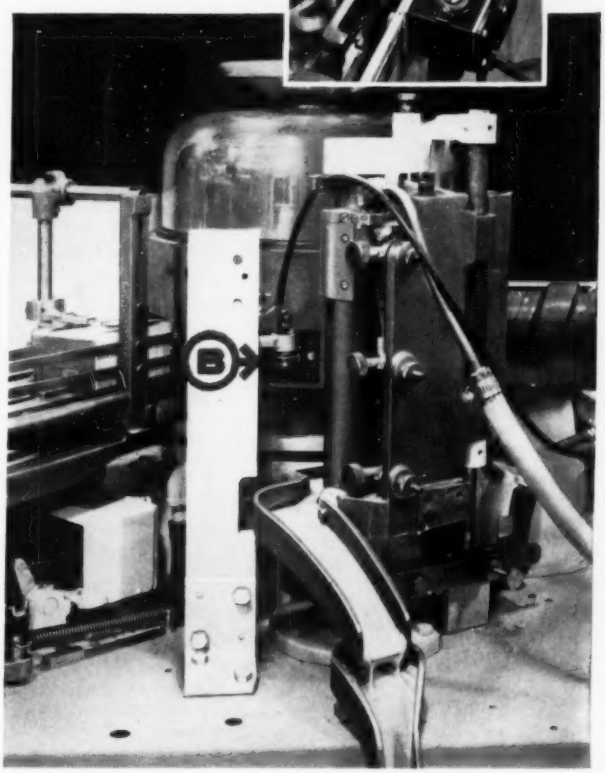
You need only 20 minutes for label changes; five minutes for bottles.

Lower cost

Prices for the PONY 300 begin at $13,500, far less than any comparable unit. There are additional savings on change-parts which cost only $250 to $550 per set.



No Bottle, No Label. Micro-switch control (A) detects absence of bottle. Prevents delivery of label to suction mouthpiece.



No Label, No Glue. Brass button in uncovered suction mouthpiece (B) contacts brass roller, completes circuit.

Send for new PONY 300 brochure

NEW JERSEY MACHINE CORPORATION

GENERAL OFFICES AND PLANT: 1500 Willow Avenue, Hoboken, New Jersey

FACTORY SALES AND SERVICE BRANCHES: Chicago, Cincinnati, Los Angeles

A dependable packaging machine source for 40 years.

Moisture-resistant corrugated

Shipping tests on hydrocooled peaches show that new wax-impregnated containerboard retains regidity, protects product, is unaffected by water soaking

By E. Evan Brown and Wendell H. Thomas†*

New shipping containers of moisture-resistant corrugated board, wax-impregnated throughout, offer promise of an effective method of reducing damage to fresh fruit in shipment from grower to market. Results of recent experimental shipments of fresh peaches from South Carolina to Northern markets indicate that significant decreases of in-transit damage are possible along with substantial saving to growers in packaging materials as well as in labor costs.

The use of moisture-resistant corrugated board as a bulk container for shipping fresh peaches would be a revolutionary step away from standard containers that have been in common use by Southern growers for many years. Packing-shed operators in Southern peach orchards have been aware of the growing use of corrugated shipping containers for packing fresh fruits and vegetables. However, with the advent of hydrocooling in the peach industry (water spraying of packed containers prior to shipment) any hope of using this material as a shipping container was doomed. Standard corrugated boxes simply fell apart after being subjected to hydrocooling operations. Therefore, wooden baskets and wirebound crates have remained in use by packing-shed operators as standard shipping containers for the bulk of Southern peaches going to Northern markets.

In the fall of 1957 the South Carolina Agricultural Experiment Station began test work directed toward developing a shipping container made from the new type of moisture-resistant corrugated box material. During the succeeding six months numerous types and designs of boxes constructed of this

*Associate Agricultural Economist and †Assistant Agricultural Economist, South Carolina Agricultural Experiment Station, Clemson College, Clemson, S. C.

PHOTO HINDE & DAUCH

Figure 1. *Corrugated boxes of new moisture-resistant board, wax impregnated throughout, are removed from hydrocooler in South Carolina peach-packing shed after undergoing 20-minute ice-water bath. Previously, only wood could withstand this water-cooling treatment.*

new material were tested along with similar boxes constructed of ordinary corrugated materials. As a result, containers using certain styles, designs and weight of M/R[1] board were selected for actual test shipments of peaches during July and August, 1958.

All told, there were eight sizes, styles, types and weights of M/R boxes in use during the shipping experiments, as shown in Table I.

Style 1 consisted of a regular half-slotted box with double ends and side, and cover. For this style the top and bottom must be stitched by the user. Style 2 was a Bliss-style box with reinforced ends and open top with furnished cover. Style 3 was an open-top box with cover. Double thicknesses were used on all four sides of the box, which had a self-locking bottom. N.M.C. stood for non-mechanical closure, 3 P.B. meant a three-piece Bliss-type box and "shy flap" indicated that it was a slotted box with an opening between flaps. P.C.P. was the nomenclature used to indicate that 69-lb. water-finish kraft linerboard was used on each side of a 33-lb. water-finish kraft corrugating media. F.C.F. meant that 42-lb. water-finish kraft linerboard was used on each side of a 33-lb. water-finish kraft corrugating media.

Table I: Size, style, type and weight of M/R material in boxes used in test shipments

Box	*Size*	*Style*	*Type*	*Weight*
1	1 bushel	3	N.M.C.	P.C.P.
2	1 bushel	3	N.M.C.	F.C.F.
3	1 bushel	2	3 P.B.	P.C.P.
4	1 bushel	2	3 P.B.	F.C.F.
5	¾ bushel	3	N.M.C.	P.C.P.
6	¾ bushel	1	Shy flap	P.C.P.
7	½ bushel	3	N.M.C.	F.C.F.
8	½ bushel	1	Shy flap	P.C.P.

Procedure

Each of four test lots included 20 one-bushel, 10 three-quarter bushel and 10 one-half bushel boxes, making a total of 40 containers of peaches in each test lot. Five control containers (baskets or crates) were also used in each of the four tests.

Staff members from the Clemson College Agricultural Experiment Station delivered the necessary experimental shipping containers to previously selected packing sheds and supervised their filling and loading. The fruit placed in these containers came over the regular processing and grading line at the shed and were placed in the M/R boxes at the same point, by the same workers and in the identical manner that crates and baskets were being filled for regular shipment from these sheds.

After filling, these boxes were placed on conveyor belts that carried them through the same hydrocooling operation as the other containers from the particular shed in which the fruit was packed (see Figure 1). As the experimental containers emerged from the cooling operation they were lifted to one side while one of the research personnel placed covers on the boxes in order not to interfere with the normal packing-shed procedures, such as lidding and labeling. The five control containers were also set aside at this time and placed with the 40 M/R containers.

Of the four trailer trucks which were used for test shipments, two used mechanical refrigeration and two used bunker ice. The usual practice is to load fruit five tiers high and in staggered rows to facilitate circulation of air. Ordinarily this procedure is followed until the truck is loaded. However, when a particular truck was scheduled to carry the experimental M/R containers of peaches, the top three tiers on the last row in the trailer were left for these containers. The control containers were placed on the top three tiers of the next to last row. It should be noted that this location on a trailer is considered to be the worst spot in the entire load as far as shifting and bouncing are concerned.

While the trailer was being loaded with regular containers of peaches, the experimental and control containers of fruit were being divided into two samples. One was held at the packing shed as a "shipping-point" sample and the other, called the "destination sample," was placed on the truck trailer as part of its load. Each of the shipping-point samples contained 16 M/R boxes and two baskets or crates. The destination sample consisted of 24 M/R boxes and three baskets or crates. In each case all eight kinds of M/R containers were equally represented, as were the conventional baskets and/or crates.

Immediately after the truck was loaded and on the way to its destination, examination was begun of the shipping-point sample. Two observers were involved in this procedure (see Figure 2). One examined or "read" the damage on the fruit, while the other served as a recorder. The same individual who "read" the damage on the peaches at the shipping point was also present to examine them when they arrived at their destination, thus eliminating personal variables.

Actual examination of the shipping-point and destination samples included very close observation of fruit on which cuts and bruises, if any, were observed and recorded. Exactly half of the fruit in each container was "read" for damage. As randomly as possible, the examiner would arbitrarily

[1]Trade name for wax-impregnated, moisture-resistant corrugated board produced by Hinde & Dauch, Sandusky, Ohio.

Figure 2. *Scientists from South Carolina Agricultural Experiment Station examining peaches for damage in carefully controlled shipping tests which compared performance of new corrugated boxes with that of formerly used conventional wooden baskets and crates.*

select two peaches from the sample container. One peach was deposited in an empty box while the other was examined in detail and damage, if any, was recorded by the other member of the team as the size and type of damage was called out by the examiner. This procedure was followed for each container of peaches in the base and control samples until all of the fruit had been examined.

Although the in-transit time for the truck load of peaches was only 24 to 36 hrs. from shipping point to destination, the person who examined the peaches in South Carolina was able in each case to arrive at the destination prior to the arrival of the truck. The M/R containers of peaches were removed from the truck and examined at the warehouse with as little delay as possible. Along with the experimental boxes, the three control containers were removed to serve as a control sample at the terminal market.

Examination of the peaches for cuts and bruises was carried out in the identical manner as in the South Carolina packing shed. Bruises on the peaches were "read" as ¼, ½, ¾, 1 in., or more. Cuts on damaged peaches were similarly recorded as ¼, ½, ¾, 1 in. or more. Records on damaged fruit were summarized at the conclusion of each experimental shipment and the various sizes of cuts and bruises converted to square inches of damaged area for each of the eight kinds of experimental containers and also for the control containers.

Relationship of cuts

The number of skin cuts and the severity of these cuts is important because of the unsightly appearance of such fruit and because each cut provides easy access for various rot-inducing organisms. Since some three to seven days or more may transpire between the time of picking and the ultimate sale to the consumer, ample time is available for rots to appear. Hence, any given-size cut is probably of more economic importance than a bruise covering the same area. Thus, the influence of a given shipping container upon the number and severity of cuts must be noted.

Since peach samples were selected at random and examined at both the shipping points and points of destination by sizes and kinds of containers, the influence of the various shipping containers upon skin cuts could be determined and the results are summarized in Table II.

At the shipping points the number of cuts per 100 peaches averaged 5.89. The number of cuts at the destination points averaged 6.50 per 100 peaches. These observations indicate that very few, if any, cuts are caused by any particular size or kind of container during transit. Actually, in-transit cuts ranged from minus 1.10 to plus 2.16 per

Table II: Number of cuts per hundred peaches by sizes and kinds of container

Sizes and kinds of containers	*Number of skin cuts per hundred peaches*		
	Shipping point	*Destination*	*In-transit*
½ bushel			
M/R boxes	4.50	6.66	2.16
¾ bushel			
Baskets	3.60	4.19	0.59
M/R boxes	4.97	6.80	1.83
Bushels			
Baskets	6.24	5.14	—1.10
Crates	8.07	8.65	0.58
M/R boxes	7.95	7.54	—0.41
Averages	5.89	6.50	0.61

100 peaches. During each of the four shipments at least one sample was found to show relatively fewer cuts at the destination point than its counterpart at the shipping point.

At the shipping points, 38.20% of the total damaged areas were found to be cuts only, while 61.80% of the damaged areas were bruises. Hence, nearly two out of every five damaged areas at the shipping points were cuts. The range was from one out of five for ¾ bushel baskets to more than one out of two for bushel crates.

Bruises

Bruising of peaches and the consequent discoloration of the skin detracts from eye appeal at the point of sale and reduces the shelf life of fruit.

In any damage-control work dealing with bruising of fruit, three factors are worthy of consideration. These are: (1) the number of peaches bruised per 100, (2) the number of bruises per 100 peaches and (3) the bruised area (square inches) per 100 peaches. Which of these three factors is the most reliable indicator is a matter for individual consideration. For this reason, all three factors are presented in this paper.

In testing the new M/R containers, a very noticeable difference was evident between these containers and conventional baskets when the number of peaches bruised per 100 was considered. The number of peaches bruised was considerably less for fruit shipped in the M/R containers than in standard baskets (Table III). The number of peaches bruised per 100 at the shipping point was relatively stable for all kinds and sizes of containers, with no significant deviation from the average of 7.27 peaches per 100. However, there were significant differences in the number of peaches bruised per 100 upon arrival of the fruit at destination points.

Data for fruit shipped in ½-bushel M/R containers indicated there was a 91.5% increase in the number of peaches bruised per 100. About 41% of the peaches in the ¾-bushel baskets and 21% of the peaches in the bushel baskets were bruised upon arrival at destination, which were increases of about 328 and 131%, respectively.[2] Similarly, the number of peaches bruised was found to have increased 86% in bushel crates[3] while those in bushel M/R containers had increased 101.0%. The least damage occurred in the ¾-bushel M/R containers (37%), while the largest increase in bruising per

Table III: Number of peaches bruised per hundred by sizes and kinds of container at the shipping point, destination and in-transit

Sizes and kinds of containers	*Number of peaches bruised per hundred*		
	Shipping point	*Destination*	*In-transit*
½ bushel			
M/R boxes	5.91	11.32	5.41
¾ bushel			
Baskets	9.58	41.00	31.42
M/R boxes	7.80	10.72	2.92
Bushel			
Baskets	9.14	21.11	11.97
Crates	4.84	9.00	4.16
M/R boxes	6.35	12.77	6.42
Average	7.27	17.65	10.38

Table IV: Number of bruises per hundred peaches by sizes and kinds of containers at shipping point, destination and in-transit

Sizes and kinds of containers	*Number of bruises per hundred peaches*		
	Shipping point	*Destination*	*In-transit*
½ bushel			
M/R boxes	7.89	14.44	6.55
¾ bushel			
Baskets	13.77	65.27	51.50
M/R boxes	10.24	13.27	3.03
Bushels			
Baskets	11.19	32.42	21.23
Crates	6.45	12.80	6.35
M/R boxes	5.25	14.98	9.73
Average	9.13	25.53	16.40

100 peaches occurred to fruit shipped in ¾-bushel baskets (328%).

Further tabulations of data were made on the *number of bruises* per 100 peaches, rather than the *number of peaches* showing bruises. These tabulations revealed that there were fewer bruises per 100 peaches for fruit in the new M/R containers than in conventional baskets (Table IV). The fact that in nearly all cases there was a substantial increase in the number of bruises during transit points out the need for improvements during this phase of peach marketing.

As stated earlier, there were no regular containers of the ½-bushel size with which to compare the ½-bushel boxes of M/R board, but data did indicate a relatively low rate of bruising for these containers. In the ¾-bushel size, the baskets had 94.1% more bruises per 100 peaches in transit than the M/R boxes. However, it must be remembered that there was only one shipment of ¾-bushel baskets compared to four shipments of the ¾-bushel M/R

[2]Statistical tests comparing the ¾ and bushel baskets and M/R containers indicated significant differences between the two. The number of peaches bruised in transit, the number of bruises and the square inches of damaged area per 100 peaches was significantly higher in the baskets.

[3]It was possible to make only one shipment of M/R boxes in comparison with crates. Because of inconclusive results of the data obtained, the authors plan to make additional comparisons in 1959.

boxes. Peaches in bushel baskets were found to have 54.2% more bruises per 100 peaches than M/R boxes of the same size, with two shipments of the baskets and four shipments of the M/R containers included in the sampling. Crates of the one-bushel size, however, had 53.2% fewer bruises per 100 peaches than did the fruit shipped in the M/R containers. This data represents one shipment of crates and four shipments of the M/R containers.

In all of these calculations, the size of the sample must be kept in mind and also that the "number" of bruises in no way indicates the "severity" of the bruises recorded. On the other hand, all bruises contribute to deterioration of the fruit and, as such, have an adverse effect on sales at retail.

Evidence at this point is inconclusive as to why the use of one kind of container would result in less bruising of peaches in shipment than another. However, one factor that might contribute to unnecessary bruising is the conical shape of the wooden baskets, where the lidding and shipping operations cause the greater number and weight of peaches at the top of the baskets to exert extreme pressure on those peaches at the bottom of the basket, thus causing bruises. The rectangular shape of the crates and M/R containers avoids this situation. In addition, in both crates and M/R containers the weight of boxes of fruit piled on top of other containers is supported by the container rather than by the fruit.

A further advantage of the new M/R boxes seems to be that this material, after hydrocooling, had just enough "give" to allow the peaches resting on or against the bottoms and sides of the container to form a slight depression or nest, which tends to cradle the peach. This observation does not intend to imply that the box itself tends to sag or bend, for this was not the case. The M/R containers held up very well in transit under regular handling and shipping techniques and practices, even though this cushioning effect was evident on the inside of the containers after the peaches were removed.

Of the three indices used to point out bruising perhaps the one of greatest interest to growers, shippers and receivers is the "severity" of the bruises incurred. The number of peaches bruised and the number of bruises found are of interest from the "shelf life" point of view. However, peaches which are severely bruised have little or no "shelf life."

Square inches of damaged area per 100 peaches is largely an expression of severity of the damaged area. The number of square inches of bruised area per 100 peaches was found to be less for the M/R boxes than for either baskets or crates at all points —at shipping and destination points and in transit. The reduction of in-transit damage is of primary concern. No basis of comparison was available for the ½-bushel M/R containers, but results indicate a very low damage ratio for this particular box. Data for ¾-bushel sizes indicate an in-transit increase in damaged area amounting to 20.98 sq. in. per 100 peaches for the basket, compared to 3.77 sq. in. for the M/R container. Bushel baskets of fruit were included in Shipments 2 and 3, while bushel boxes of M/R board were included in all four experimental shipments. The increase in bruised area per 100 peaches while in transit was found to be 6.80 sq. in. for bushel baskets, while that in the M/R containers was 4.04 sq. in., or a reduction in damaged area of 40.6%. When the 4.04 sq. in. of bruised area for the M/R boxes was compared with the 6.35 sq. in. of bruised area found in the crates, which made up the fourth experimental shipment, a 36.4% reduction in change was noted.

Table V: Square inches of bruised area per hundred peaches at shipping and destination points for various sizes and kinds of containers

Sizes and kinds of containers	*Sq. in. of bruised area per hundred peaches*		
	Shipping point	*Destination*	*In-transit*
½ bushel			
M/R boxes	4.39	6.65	2.26
¾ bushel			
Baskets	6.17	27.15	20.98
M/R boxes	3.85	7.62	3.77
Bushel			
Baskets	5.97	12.77	6.80
Crates	6.45	12.80	6.35
M/R boxes	4.66	8.70	4.04
Average	5.25	12.61	7.36

Indications are that the new M/R containers will be less expensive than conventional containers in use at present.

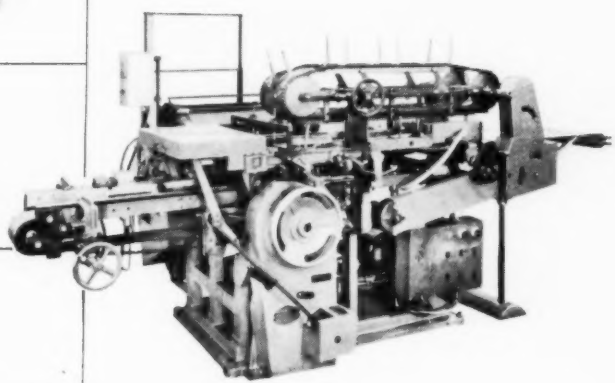
Other applications

There are significant possibilities for the packaging of many other wet products in this type of moisture-resistant corrugated board. In the few months that boxes made of M/R board have been on the market, they have been used for apples (for cold storage), meat, and both greenhouse and field lettuce, in addition to the hydrocooled peaches.

Other wet-product applications in which these containers are currently being tested include fresh fish, lobsters, cut flowers, corn, nursery products, grapes, peas, asparagus, radishes, broccoli, celery, cauliflower, milk and bulk ice cream.

Tests indicate that when the proper box design is utilized, M/R board can be used effectively for the packaging, shipping and storage of almost any hydrocooled, iced or wet-packed product.

NOW increased speed UP TO 120 PACKAGES A MINUTE on the PACKAGE Model FA



For consistently neat, attractive wrappings, the Package Model FA now gives you speeds up to 120 packages a minute in the smaller sizes. One machine assures top daily output on cartons, trays or specialty items. Size changes require only minutes time, and another roll of wrapping material can be inserted in less than five minutes. An electric eye mechanism gives you the most accurate registration possible, with automatic paper stop to control feeding.

WRAP WITH POLYETHYLENE TOO! Special features on the FA assure trouble-free operation when wrapping poly. All FA parts in contact with the poly covered packages are Teflon coated to prevent drag. Thin Fiberglas belts—an exclusive Package application—cover flexible side heaters and coolers for fast positive sealing of the double-point end folds.

For full details on wrapping with polyethylene and the Model FA contact your nearest PACKAGE representative.

compare these features

MATERIALS: FA glues or heat seals. It can handle waxed, sulphite or Kraft paper, cellophane, glassine, polyethylene and reinforced foils.

SIZE RANGE: For Model FA, 2" to 11½" L, 1⅛" to 5⅝" W, ⅜" to 3½" H. Models FA-2, -3 and -4 will handle larger packages.

PAPER FEEDS: Both roll and sheet feed is available.

END FOLDS: Double-point end fold is standard; reverse double-point fold, single- or double-point turned-under fold, crimp seal and special folding for extension edge boxes also available.

ATTACHMENTS: Easy-opening tape, medallion and code dater attachments available.

PMMI

PACKAGE

PACKAGE MACHINERY COMPANY, EAST LONGMEADOW, MASS.
NEW YORK • PHILADELPHIA • ATLANTA • BOSTON • CLEVELAND • CHICAGO • KANSAS CITY
DALLAS • DENVER • LOS ANGELES • SAN FRANCISCO • SEATTLE • TORONTO • MEXICO CITY

Questions & Answers

This consultation service on technical and engineering packaging subjects is at your command. Simply address your questions to Technical Dept., Modern Packaging, 575 Madison Ave., New York 22, N. Y. Your name or other identification will not appear with any published answer.

Mothproof compound in plastic

Q: *We pack a number of mothproofing compounds in different types of packages. We are considering packaging paradichlorobenzene in a rigid, transparent molded plastic box, as part of a household kit. We have been told that this compound will affect certain plastics. Can you tell us what type of plastic is recommended for a package of this type?*

A: Paradichlorobenzene will react with many plastics to cause crazing, softening and in other ways affect either the appearance or the effectiveness of the plastic. Since you require a rigid, transparent box, this will eliminate a number of transparent materials in the form of flexible films and bags that have been proved effective for holding such products.

The best answer to your problem is to contact manufacturers of the many plastics materials that are used in molding. They can tell you if any of their materials are suitable for this use and also will suggest molders who can make the containers. You should then obtain sample packages of the various plastics and have them tested by a laboratory at elevated temperatures and humidities to be sure that there is no reaction between the product and the plastic. In following this procedure, there is a possibility that you will find a plastic material and a box construction well suited to the packaging of this chemical.

Protective cigar wrap

Q: *We are makers of cigars and most of our brands are cellophane wrapped. Many years ago the cellophane was adopted as a sanitary and attractive wrapper, which also prevented drying out of the tobacco during the winter months. Today, we find that most of our sales outlets are air-conditioned and the cigars are drying out even in summer months. We are willing to rebuild our machines to use another type of transparent wrapper. Our question is: What material shall we use to give the cigars year-round moisture protection?*

A: This is a unique situation. The creation of a low-humidity atmosphere by the use of air-conditioning has resulted in the need for a wrapper which will give your cigars year-round protection instead of protection for something less than half a year, as previously required. One way to overcome this problem is to try to control the inventories of retail outlets so that the shelf life does not become excessive. Another approach is to improve the moisture-proofness of the cigar wrapper.

It is suggested that you try the polymer-coated cellophanes in place of the cellophanes normally recommended for cigar wrapping. The polymer-coated cellophanes would increase your wrapper costs slightly, but they would handle on your present type of machine and should provide some additional shelf life for your product.

There are a number of plastic films that have very low water-vapor permeability, but the use of these films would require complete rebuilding of your present wrapping machines. Also, there could be a problem of providing an easy-opening means, since complete heat sealing could make opening of the wrap difficult. Another consideration is that some of the plastic films may not provide as effective aroma retention as does cellophane.

It is suggested that laboratory tests be used as the basis for evaluating any new wrapper for moisture and flavor protection in comparison with your present wrap to make sure that its performance meets your new shelf-life requirements.

Labeling hour-glass jars

Q: *We are adopting an hour-glass-shaped glass container with a screw top for a new product. We wish to put a thin, full wrap-around label on the constricted portion of the jar, but have found this label very difficult to control and cannot obtain an automatic machine to handle the job. Can you help us?*

A: You have picked a very difficult label application that has been tried several times and for which no automatic machine has yet been designed, to our knowledge. However, there are one or two important points in the construction of label and container that, if followed, might make it easier to adapt a standard labeler to the job.

First, the constricted portion of the container should be as shallow as appearances will allow and should be neither a curve nor a sharp angle. Instead, a flat, cylindrical area—measuring at least the width of the label—will provide space to apply and register the band accurately. The label should have a simple design with no longitudinal lines, which make slight inaccuracies in registration more obvious.

With just these changes, it should be possible to adapt a 60-per-minute turret labeler of the type used to apply neck bands to ketchup bottles. Special label pickers would have to be machined and the overlapping ends of the label secured in two stages by special, semi-circular pads, but this should not be too costly.

Also, there is a horizontal, semi-automatic labeler available that could probably apply this band at a rate of 40 per minute, but the job would have to be finished by hand.

If you would abandon the idea of a full wrap-around label and adopt a shorter band with, say, rounded ends, there are several high-speed rotary thermoplastic and glue labelers that could probably handle this type of label at speeds up to 300 per minute. Special label cylinders and compression belts would have to be constructed and this would probably cost several thousand dollars.

PROPORTIONAL

REGISTRON

New Champlain "Eye" gives automatic proportional correction

Model C300 Registron offers exclusive *standstill* phasing for selection of web scanner target and automatic zeroing-in of all phase micrometers — for minimum web waste prior to production. Color-to-color and cut-to-print mis-register are corrected instantaneously — *in direct proportion to the error.*

Correction computers are housed in an air-purged cabinet — for placement anywhere in press room or at a remote location.

Easily installed on all equipment with running register or compensating roller systems, the new Model C300 maintains remarkable accuracy without manual adjustment of sensitivity controls.

Simple to operate — no special skill required. Automatic features insure immediate operational efficiency.

Write for Bulletin C300.

Champlain

Champlain Company, Inc., 88 Llewellyn Ave., Bloomfield, N. J. Chicago Office: 7356 N. Cicero Ave., Chicago 46, Ill. In Europe: Bobst-Champlain, Prilly-Lausanne, Switzerland

Equipment & Materials

Heat-sealable bakery cellophane

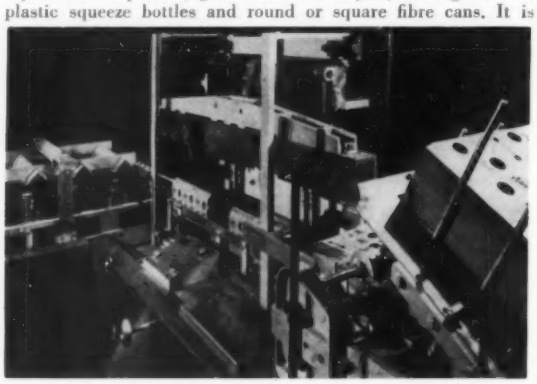
A heat-sealable cellophane, designed for use in packaging hard rolls, hard-crusted breads and other bakery products that tend to lose their crispness when packaged in sealed, moistureproof materials, has been introduced by du Pont. The company's PSD grade cellophane has a relatively high water-vapor-transmission rate, as its suggested packaging applications indicate. According to the supplier, the new film—whose base sheet is the same as that used for moistureproof heat-sealing types—is the result of a modified coating formulation. The film heat seals in the same temperature range as for MSD films, and seal strength is reported to be adequate for the overwrapping or bag-making applications for which it is intended. It can be run on standard machinery and is printable. Film price has been set at 62 cents per lb.; yield is 19,500 sq. in. per lb. *E. I. du Pont de Nemours, Inc., Wilmington 98, Del.*

Supplier of molded polyurethane foam

Bostrom has formed a chemical division for the manufacture of molded polyurethane foam products and integral foam-and-vinyl skin components. Elmore J. Baruth has been named to head the new operation. According to the company, its Permathane foam now can be molded to exact specifications for a variety of applications, including protective packaging. *Bostrom Corp., 133 W. Oregon St., Milwaukee 4.*

Versatile new multipacker

The Wrapak 70, Container Corp.'s new automatic multipacker, reportedly can accommodate a wide variety of cans, bottles and jars at speeds of up to 70 cartons per minute in single or double line. The machine forms a special two-to-12-unit carton that is adaptable to chimed or chimeless containers, aerosols, screw-top or cone-top cans, glass bottles and jars, folding cartons, plastic squeeze bottles and round or square fibre cans. It is



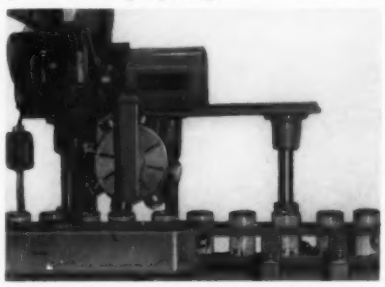
shown here forming multipacks for shaving cream in aerosol cans. The company points out that feeding of the machine's carton hopper (right) is the only manual operation necessary. The unit handles multipack cartons ranging in size up to 18 in. long by 6⅝ in. wide, with height adjustable up to 8¾ in. It is equipped with an automatic control that halts machine operation when the supply of containers or multipack cartons is exhausted. According to the supplier, the unit can be changed over in 30 min. to accommodate different-size containers. *Container Corp. of America, 38 S. Dearborn St., Chicago 3.*

Intermediate-size juice can

An intermediate-size, two-base, 29-oz. juice can has been introduced by Crown. Called the Crown 2-29, it was developed in response to requests from citrus and other juice canners, the supplier says. The new container is the same height as the conventional 46-oz. can and reportedly can be run through 46-oz.-can-handling equipment—including filling, processing, cooling and casing units—with a minimum of changeover. Other cited advantages of the can include: higher filling speeds, adaptability to store shelves and easy in-home handling. *Crown Cork & Seal Co., 9300 Ashton Rd., Philadelphia 36.*

Friction-lid applier

Automatic application of friction lids of all sizes can be integrated into high-speed production lines with its new straight-line Model CIS-A, says Resina. A variable-speed drive permits speeds of 40 to 120 per minute in applying lids to cylindrical or rectangular metal or fibre cans, reports the supplier. In operation, lids are fed



from the hopper to a star-index wheel (left) that positions the friction lids on the filled containers. The containers then travel under a piston-action arm (right) that tamps the lids securely into place. An automatic control prevents the feeding of lids when no container travels under the wheel. *Resina Automatic Machinery Co., 572 Smith St., Brooklyn 31.*

Line of colorful foil labels

Colorful foil labels printed with harmonizing pastel inks are being made available to label users by Dennison. Called Colorama, the stock labels provide high visibility and design possibilities in a virtually unlimited range of color choices, the company says. Samples can be obtained on request to the supplier. *Dennison Mfg. Co., Framingham, Mass.*

Low-cost, odorless paper-coating emulsion

An emulsion binder for paper coatings, claimed to be particularly suitable to food wraps because of its grease resistance and freedom from odor, is offered by Dewey & Almy. Called Everflex MC-300, it is a fully saturated vinyl-acetate copolymer that also is reported to have excellent stability to heat, light and oxidation, and will not yellow with age. Other cited advantages of the emulsion are that it offers substantial cost savings, provides a smooth coating with good printability for both letterpress and lithography, has high resistance to pick and crocking and offers exceptional folding characteristics. *Dewey & Almy Chemical Co., Div. W. R. Grace & Co., Cambridge, Mass.*

Bottle inspector and case opener

Two new machines for use by packagers of bottled products have been made available by RCA. The company's BIM beverage-inspection machine is an electronic unit that checks bottle contents as the individual containers travel past a non-oscillating, multi-beam optical system. Light deviation caused by the presence of foreign particles actuates a rejection device in the system. According to the company, the machine can inspect filled 6-to-16-oz. bottles at speeds of 300 per minute; 32-oz. bottles at 200 per minute. The other newly introduced machine is an automatic opener for two-flap beer-shipping cases. It operates at a rated speed of 35 cases per minute. A shipping case entering the unit is automatically synchronized with the opening mechanism. As the case is moved into position, it is elevated slightly above a positive latching device, then is lowered so that a metal plow can raise the two closure flaps from one end while a metal hook assists in the job from the other end. After the flaps have been opened, the case travels to a

Packaging with

VISQUEEN TRADEMARK FILM

costs less because the superior quality of VISQUEEN FILM cuts costs in fabrication, filling, transit, storage and store

STRENGTH

VISQUEEN film is stronger. More uniform thickness. No thin, weak spots. Breakage is minimized. Your product gets better protection: In transit, storage, store.

CLARITY

VISQUEEN 'Q' film *adds* sparkle to your product. Shows product to better advantage. Never ages or yellows. Needs no special grade for summer and winter. Helps impulse sales.

ECONOMY

VISQUEEN film's superior uniformity permits use of thinner, more economical gauges. Less breakage prevents rejects. Yields more bags per pound of film. Handles easier, faster.

For the most experienced help in packaging, write now or use the information request tag below

information request tag

VisQueen Trade Mark

clip this tag— attach to letterhead, mail.

VISQUEEN *film—first and foremost polyethylene film.*
A product of the long experience and outstanding research of
PLASTICS DIVISION
VISKING COMPANY *Division of* UNION CARBIDE *Corporation.*
6733 West 65th Street, Chicago 38, Ill.
In Canada: VISKING COMPANY DIVISION OF UNION CARBIDE CANADA LIMITED, Lindsay, Ontario.
VISKING, VISQUEEN and UNION CARBIDE are registered trademarks of Union Carbide Corporation.

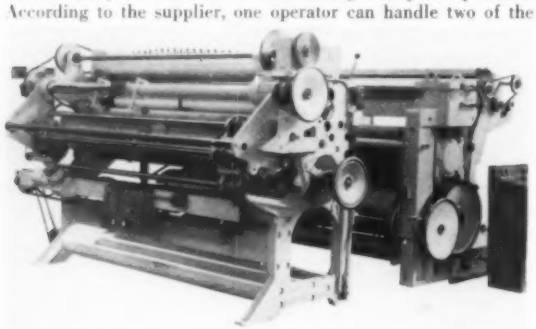
discharge conveyor. The flap-opener is adjustable for all case sizes, the manufacturer reports. *Radio Corp. of America, 30 Rockefeller Plaza, New York 20.*

Versatile high-density polyethylene film

Koppers Co. reports that a high-density polyethylene film, combining many desirable packaging properties, can now be manufactured from its Super Dylan Type 6060F. The film is the result of experiments in the high-melt-index range. It is claimed to possess excellent clarity and gloss and sufficient stiffness to handle well in packaging equipment. In addition, the company says, its high heat resistance and quick set-up permit the film to be sealed at faster rates. According to the company, the film (which also is reported to have excellent aging characteristics) can be produced by three methods, permitting a variety of end-use applications. The water-quench method is suggested in cases where clarity and gloss, as well as ease of opening, are of prime importance for overwrap purposes. The chilled-roll casting method is indicated where more balanced strength in the film is desired. And the tubular or blown method is suggested if the film is to be used for packaging frozen or other foods designed to be cooked in the bag. *Koppers Co., Inc., Plastics Div., Koppers Bldg., Pittsburgh 19.*

High-speed automatic rewinder

Continuous operation at speeds of more than 1,000 ft. per minute are cited by Paper Converting Machine for its new Model 2481 automatic rewinder. The 90-in. unit transfers the web automatically for each set of rolls during full-speed operation. According to the supplier, one operator can handle two of the



rewinders because the mandrels remain in the machine and an automatic core loader eliminates the need for manual labor. The unit has a shear-cut perforating attachment. The embossing section of the rewinder has air-loaded 20-in.-diameter embossing rolls with micrometer adjustments that are claimed to give accurate control of nip pressure. These adjustments also offer positive control for maintaining the same pressure when it is necessary to separate the rolls and then bring them back to original operating position, the supplier points out. *The Paper Converting Machine Co., Green Bay, Wis.*

Linerless ice-cream cartons

Great Lakes Box is marketing a new line of two-color, linerless ice-cream cartons. Cited advantages include good product protection, low cost and self-selection sales appeal afforded by the two-color printed design. *Great Lakes Box Co., Div. St. Regis Container Co., 7275 Wentworth St., Cleveland 2.*

Transparent vinyl unit packages

Single-portion packaging in transparent vinyl of oil, grease, soap and other liquid or semi-liquid nonfood products is offered by Prodoplast. The company reports that it can supply sealed, flat, liquid-tight vinyl packages with wall thicknesses ranging from 6 to 20 mils. A variety of package shapes is available, as well as strip packs and compartmented packages to hold two or more products that can be used separately or mixed at the point of use. The supplier also will print the packager's trademark or advertising message on the flexible package. *Prodoplast Corp., 26 E. 23 St., New York 10.*

Automatic carton-flange bender and feeder

FMC's new Stokesbend automatic carton-flange bender delivers individually pre-bent (up to 180 deg.) carton blanks one at a time to the operator. The unit, which occupies 21 by 36 in. of floor space, draws from a 24-in. stack of blanks which are automatically folded and vacuum fed from a chute onto the packing table. According to the company, its new unit offers positive feeding and trouble-free handling of a wide variety of board. Because the machine has only one change part, adjustment for different-size blanks is accomplished swiftly, the supplier claims. *Stokes & Smith Plant, FMC Packaging Machinery Div., Food Machinery & Chemical Corp., 4942 Summerdale Ave., Philadelphia 24.*

Stock-design coffee bag

A three-color-on-white stock-design coffee bag has been introduced by Continental Can. The company's "XX" bag is white bleached kraft with a glassine inner liner. Bag design is in yellow, red and blue, with ample unprinted area for the coffee packager's name. The bag's back panel contains recipes for making percolator, drip or vacuum coffee. *Continental Can Co., Flexible Packaging Div., Mt. Vernon, O.*

Aerosol production line

A new Colton-Alpha production line, claimed to handle a wide variety of aerosol-container filling requirements from 60 to 200 cans per minute, is available from Colton. The line consists of a series of individual continuous rotary machines, each performing a specific operation in the filling, valve-crimping and pressurizing process. A star-wheel arrangement at the front of each unit removes containers singly from the conveyor line and deposits them in stations on the periphery of a rotary drum. The filling, crimping or pressurizing operation is performed while the containers travel around with the drum and are redeposited on the conveyor line. Variable-speed drives for each of the rotary drums permit accurate synchronization, the supplier says. The machines, each available with a variety of stations to meet individual production requirements, are: the Model 1051 liquid filler (with four, eight, 12 or 16 stations); the Model 1351 crimper (same number of stations); the Model 1352, which performs vacuum and propellant-purge operations as well as crimping (with four, eight, 12, 16 or 24 stations); the Model 1451 gasser for pressure filling of nitrogen, nitrous oxide, carbon dioxide, etc. (with four, eight, 12 or 16 stations); the Model 1452 gasser, which also shakes the container (with four, eight, nine, 12, 15 or 16 stations); the Model 1701 tester (with 12 or 16 stations), and the Model 1651 pressure filler for fluorinated and other hydrocarbon propellants (with four, eight, 12, 16 or 24 stations). The type of propellant used by the packager, of course, determines the equipment needed for his aerosol line. All machines in the supplier's rotary-index line are equipped with a no-can, no-fill control. *The Arthur Colton Co., 3400 E. Lafayette Ave., Detroit 7.*

For automation of filling machinery

An air-hydraulic attachment for automation of filling machinery is offered by Electro-Mechano. By the proper adjustment of two easily reachable cams, it is possible to set up any combination of fast, slow or skip-feed strokes, the manufacturer says. The unit is available in 2-, 4-, 6- and 8-in. stroke lengths. *The Electro-Mechano Co., 261 E. Erie St., Milwaukee 2.*

Air-hydraulic die-cutting press

Its new air-hydraulic die-cutting press has been developed specifically for cutting rigid plastic and plastic-like materials efficiently while eliminating the labor cost of trimming operations, says Tronomatic. Use of steel rule dies and the fact that the machine operates from available shop air without the need for pumping equipment are additional economies claimed by the supplier for the unit. Loading and unloading operations are performed on a shuttle table outside of the press and away from the ram. Slide positioning of the table in the press automatically readies it for die cutting. High production speeds are effected by heat-assisted air-hydraulic power which completes the clean-cut trimming of the object in one quick stroke, the company reports. In-machine controls are designed to prevent accidental overloading. Available in two models (D-2436, with a cutting area of 24 by 36 in., and D-3050, with a cutting

the president's

AWARD

PARAMOUNT WINS HIGHEST HONORS IN NATIONAL PACKAGING COMPETITION

The President's Award is the "**Oscar**" of the flexible packaging industry. In winning this coveted award, plus two additional first place awards, Paramount is proud of the honor it has received, proud of the recognition for the year's best retail design, best merchandising impact, and best functional performance. And, above all else, Paramount is proud of its staff of experts who create "Imagination Impact" that creates award winners.

Award winning Mimi de France girdle package, designed by Paramount for Republic Mills Corporation. Actual package available upon request.

paramount packaging corporation

General Offices and Plant No. 1
—3111 W. Allegheny Ave., Phila., Pa.
Plant No. 2—Chalfont, Pa.
Plant No. 3—358 W. Ontario St., Chicago

Flexographic and rotogravure color printers of cellophane, polyethylene, mylar, pliofilm, acetate, foil, laminations and glassine

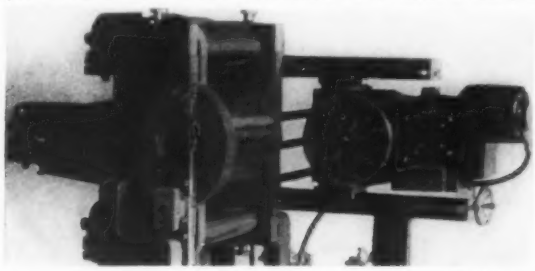
area of 30 by 50 in.), the new unit accommodates sheet material and multiple vacuum-formed sheets. It cuts multiple blister packages in drawn depths of up to 12 in. *Tronomatic Machine Mfg. Corp., 1881 Park Ave., New York 35.*

Protective wax lining for paper bags

A wax lining for paper bags that is claimed to build up a thicker, denser wax coating without increasing bag weight or cost has been developed by Moser Bag & Paper. Called Hevi-Kote, the material is produced by a formula that reportedly minimizes wax penetration into paper fibres, thereby accumulating more wax on the surface for better coverage and body. Its lining retards wicking, the company says. It is now being used for all wax-lined bags in the company's line. *Moser Bag & Paper Co., 3049 E. 55 St., Cleveland 27.*

Unit prints container side walls

Cosom Engineering is introducing a machine for printing the side walls of cylindrical, open-end containers. The flexographic-printing unit is claimed to accommodate straight-wall or tapered containers as well as containers with flared or flanged



openings. In operation, containers to be printed are loaded on spindles attached to a rotary turret, then brought into contact with the printing unit. Speeds of 4,000 printed containers an hour are reported for the machine, which can be automatically loaded and unloaded without interrupting the printing operation. The Cosomatic Rotary Flexographic Printer prints up to three colors simultaneously, with completely accurate register assured by gear-driven printing towers, the supplier says. Adjustment to different sizes or to tapered containers is said to require only a few simple adjustments. *Cosom Engineering Corp., 6028 Wayzata Blvd., Minneapolis 16.*

Redesigned line of plastic vials

Armstrong Cork has redesigned its line of plastic pharmaceutical vials with polyethylene snap caps. Aim of the redesign, the supplier says, is to make them more serviceable and more attractive. The vials now have reduced taper, for more effective labeling. A special treatment in the surface of the containers permits water-soluble adhesive labels to adhere more firmly, according to the company. The polyethylene caps, formerly dome shaped, now are flat-top style, for easier stacking and to simplify the application of price marks or seals. Two new sizes (3 and 5 dram) have been added to the line, which also includes 7-, 10-, 12- and 14-dram vials. Two former sizes (2 and 4 dram) have been discontinued by the manufacturer. *Armstrong Cork Co., Lancaster, Pa.*

New roll-leaf stamping presses

OlsenMark has introduced a new line of medium-weight roll-leaf stamping presses. The Kensol 36 is a hand-operated press that reportedly will stamp up to 1,000 items per hour. A double-toggle press, it accommodates items of up to 2 in. in height and has a 3-in. movement of the stamping head. This long stroke, the supplier says, allows the object to be fed and removed more quickly and eliminates the need for a sliding table that may shift the work out of register. The company's Kensol 36T is an air-operated unit with a rated capacity of 1,500 impressions per hour. It is equipped with an adjustable electric dwell timer that automatically compensates for thickness variations in objects to be stamped. The Kensol 45T, also air-operated, has a rated production capacity of 2,000 pieces per hour. It is equipped with a left-to-right cross-pull, roll-leaf attachment and a transparent, acrylic-plastic safety gate. *OlsenMark Corp., 124-132 White St., New York 13.*

End-loading case former, filler, sealer

J. L. Ferguson has introduced a fully automatic case former, filler and sealer for end-loading corrugated cases. Designed to load wire-bailed paint cans, the new Packomatic unit also can be adapted to a wide variety of can sizes, patterns, casing speeds and products, the company claims. In operation, the machine feeds knocked-down corrugated containers into an automatic case-forming mechanism. The end-loading cases then are positioned to accept filled paint cans which have passed through a special bail-orientation and bail-positioning section. After end loading, the case is sealed and automatically turned to travel lengthwise on a conveyor for imprinting, shipment or storage. According to the supplier, cans are end loaded in such a position that their bails cannot damage labels or cans during shipment handling. *J. L. Ferguson Co., Joliet, Ill.*

Heavy-duty polyester-backed strapping tape

A waterproof, pressure-sensitive strapping tape, designed for heavy-duty packaging applications, has been introduced by Permacel-LePage's. Called Permacel 163, the tape derives its waterproofness from a polyester backing and special transparent adhesive, the supplier says. Rayon-strand reinforcement in the tape provides high tensile strength and excellent shock resistance, while the polyester backing offers abrasion resistance, the company claims. In a 100-hour laboratory test conducted to subject the tape to the equivalent of more than three years of outdoor exposure, it reportedly remained securely anchored to the test panel and showed no brittleness, peel-off or shrinkage. *Permacel-LePage's, Inc., New Brunswick, N.J.*

Smaller incline-impact package tester

Now available from L.A.B. Corp. is a smaller model Conbur incline-impact package tester. The unit, which has 400-lb. capacity, is intended for conducting impact tests on small appliances, furniture, food and drug packages and other items which are too small to be tested economically on machines with greater load capacities. Designated the Type 400-CM-116 Conbur, it utilizes a simple inclined monorail structure to support and guide the load-bearing dolly. The latter is equipped with rubber-tired wheels and anti-friction bearings to minimize noise. Another feature reported to contribute to quieter operation is an enclosed barrier which permits the use of ballast to deaden noise and absorb shock. This shock-absorption feature, the company says, permits the machine to be used without the need for bolting it to the floor. *L.A.B. Corp., Skaneateles, N.Y.*

Pictorial cup-package metal lids

Pictorial metal lids for cottage-cheese containers and other cup-type packages are now available from Continental Can.

Designed to stimulate appetite appeal, the lids are printed with a variety of colorful stock vignettes. The one shown features a color reproduction of a strawberry, printed over product data. Three different-size lids are offered by the supplier —the 8F lid for 8-oz. squat and 12- and 16-oz. semi-squat containers; the 12F for 12-oz. squat containers, and the 16F for 16-oz. squat and 32-oz. semi-squat containers. According to the company, the metal lids also provide for increased capping speeds, double-seal locking, tamper-proof closure and a more rigid package. *Continental Can Co., Paper Container Div., 349 Oraton St., Newark 4.*

Hydraulic web guide for accurate register

Stanford Engineering's Model P-H 55 hydraulic web guide is reported to hold accurate side register in all types of web processing. The unit is designed for use in such web-fed operations as bag-making, coating, laminating, slitting and printing. According to the company, the machine develops sufficient

Best package of the show

the president's
AWARD

...printed with
BBD
Speed-E-Brite Flexographic Ink

For the second straight year the President's Award of the National Flexible Packaging Competition—the converting industry's highest honor for flexible packaging excellence—has gone to a package printed with a BBD flexographic ink. The package also won First Awards in the "Polyethylene Bags and Pouches" and "Soft Goods, Wearing Apparel" divisions of the contest. The award-winning package was an extremely complex 6-color printing job which called for exceptionally high-quality reproduction and close teamwork between the converter and designer, Paramount Packaging Corporation of Philadelphia and Chicago, and their ink maker. Multi-color trapping, close register, very fine line detail and subtle shadings made the package more difficult to print than day-to-day work . . . and required an ink that could preserve the delicate quality of the design. The results achieved are proof of the quality of BBD flexographic inks and the skilled personalized service of our flexographic ink specialists.

CONGRATULATIONS...

PARAMOUNT PACKAGING CORPORATION for your President's Award package. BBD is proud to have played a part in helping this leading flexible packaging converter produce a prize-winning, sales-making package.

SPEED-E-BRITE, the ink used on the President's Award package, is a low-viscosity ink combining high color strength and excellent gloss . . . outstanding for printing polyethylene film and other popular packaging materials. For sample prints and free Technical Data Sheet call your nearest GPI office or write General Printing Ink Company, 750 Third Avenue, New York 17, N. Y.

GPI
Sun
Branches in all principal cities

Bensing Bros. and Deeney Flexographic Inks

Product of

General Printing Ink Company

Division

Sun Chemical Corporation

750 Third Avenue, New York 17

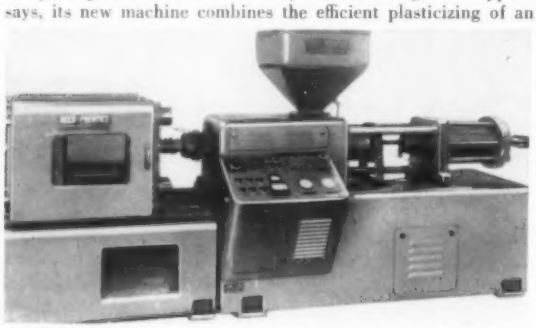
power to move the heaviest unwind or rewind rolls, yet provides precision correction to within plus or minus 0.010 in., for substantial savings in time, material and operating costs. The web guide features an "automatic pilot" mechanism that receives the signal of any deviation in web path from the sensing head and translates it into corrective action of the hydraulic power cylinder for immediate repositioning of the web to its proper course. The new unit is available in various combinations of size and power. *Stanford Engineering Co., Salem, Ill.*

New two-color marking head

A two-color marking head, featuring independent feed adjustment for each of two different roll-leaf colors, is announced by Acromark. Reported to be adaptable to conventional hot-stamping presses, the head is equipped with interchangeable cartridge heaters. Each roll-leaf feed can be set independently, and with a 4-in. press stroke. Maximum amount of roll-leaf feed on one advance is 6 in.; for the other it is 8 in. Roll leaf up to 7 in. wide can be accommodated for a single color. Two color rolls totalling 7 in. in width also may be used. Use of the two-color marking head makes possible more attractive design on the closures and bodies of plastic containers, says the supplier. Use of the dual-feed advance also effects economies in one-color work, the company reports. *The Acromark Co., Elizabeth, N.J.*

New machine for molding thermoplastics

Reed-Prentice's Jetflo "6" is claimed to offer an entirely new method of molding thermoplastic materials. By effectively using the principles of extrusion and injection molding, the supplier says, its new machine combines the efficient plasticizing of an



extruder with the speed and versatility of an injection-molding machine. Developed in cooperation with Monsanto's Plastic Div. research dept., the unit is reported to make possible very-high-speed molding of thin sections as well as increased molding speeds on other items. The machine dry cycles in 1.3 sec. at minimum stroke and 2.9 sec. on a full 8-in. stroke. It consists basically of a 175-ton mold-clamping mechanism and platens coupled to a 100-lb.-per-hour extruder. The extruder features a hollow screw with an actuating plunger within the bore. Because the plunger always acts against the plasticized material located in the plunger cavity at the forward end of the hollow screw, pressure required to inject into the mold is much lower than is normally required and plunger speeds are much faster, the company says. *Reed-Prentice Div., Package Machinery Co., East Longmeadow, Mass.*

16-roll supercalender installed

What is claimed to be the largest supercalender currently producing glassine paper in the U. S. has been installed at Hartford City Paper's plant. The 16-roll supercalender, balanced to run 1,000 ft. per minute, will service all three of the company's Fourdrinier paper machines. It permits the firm to supply glassine papers in widths up to 96 in. *Hartford City Paper Co., Hartford City, Ind.*

Polyethylene-packaging adhesive

A packaging adhesive designed to bond seams and bottom flaps of polyethylene-lined kraft or burlap bags and other containers is offered by Rubba, Inc. Called Rubbatex, it is adaptable for any moistureproof package combining polyethylene with paper, kraft board, chipboard and other porous materials, the supplier says. The adhesive reportedly forms a strong, permanent bond that is impervious to temperature changes. Other cited characteristics are that it is shock-resistant, flexible, non-crystallizing and has excellent aging qualities. Because it is fast grabbing, the company says, the adhesive is suitable for high-speed production operations. It is available in several viscosities, depending on the need. *Rubba, Inc., 1015 E. 173 St., New York 60.*

Multi-size carton folder

A new automatic machine for folding and filling many different sizes of cartons is offered by Rimbach. The unit is reported to fold and fill at speeds of 15 to 110 cartons per minute. Claimed to be low in cost, the machine also is available with attachments for automatic weighing and counting of pieces to be filled. Interrupted indexing motion permits more accurate parts inserting or carton filling, the supplier says. *Rimbach Mfg. Co., Inc., 1659 W. 135 St., Los Angeles.*

Wax for use in packaging

Developed for use by manufacturers of waxed paper, cartons and other containers, Warcocire 190 is a petrowax that combines hardness with a certain plasticity, reports its maker, Warwick Wax. The material also has characteristics that make it desirable as an additive for all types of polyethylenes, the supplier claims. Samples and technical data are available from the company. *Warwick Wax Co., Sub. Sun Chemical Corp., 750 Third Ave., New York 17.*

One-way shippers use polystyrene padding

Lightweight, disposable containers for shipping nitric acid and similar bottled liquids are available from Package Research Laboratory. One holds six 5-pint bottles and consists of a wirebound box with molded foam polystyrene pads cushioning the bottles at the top and bottom. According to the supplier, the new shipper saves 21 lbs. in weight compared with the standard returnable case. The other disposable shipper, for twelve 20-oz. bottles, consists of a wirebound box with interior packing of expanded polystyrene bonded to kraft paper on both sides. Both containers are resilient units that give slightly under impact but do not break, the company says. *Package Research Laboratory, Rockaway, N.J.*

Inks for printing on cellulose acetate

Claremont reports that its "Maxiprint" series of flexographic inks offers exceptionally clean printing on cellulose-acetate films. Print adhesion and block resistance remain excellent after aging under both accelerated tests and ordinary storage conditions, the supplier claims. *Claremont Pigment Dispersion Corp., 39 Powerhouse Rd., Roslyn Heights, N.Y.*

Powerful new bin vibrators

Eriez Mfg.'s line of V38 bin vibrators has been augmented by two new models, which are reported to offer greater power. Designed for use with bins, chutes and hoppers up to 3/16-in. wall thickness and 20-cu.-ft. capacity, the new models are the V38-40P and the V38-40S. The powerful, pinpointed vibration set up by these units assures steady flow of granular, lumpy or powdered materials by eliminating clogging, bridging or packing, the supplier says. *Eriez Mfg. Co., Erie, Pa.*

New stock aluminum-foil trays

Two new stock aluminum-foil trays are available from Ekco-Alcoa. Both are designed for use by packagers of bakery products. One is an oval-octagonal tray with a capacity of 32 fl. oz. It has a vertical flanged rim that can be crimped over a separate cover to complete the package. The other stock item is a semi-circular tray for packaging a half pie. *Ekco-Alcoa Containers Inc., Wheeling, Ill.*

Supplier emphasizes re-use packages

Atlantic Can reports that it has broadened its operations to include other types of packaging materials—including plastics, glass and paperboard—as well as metal cans. The company says it is placing special emphasis on the development of re-use packages. A design bureau has been created by the supplier

Prize Package--

Printed in 6 colors on a Kidder Filmprinter

The Kidder Press Company is delighted to be associated with the Paramount Packaging Corporation in the production of Republic Mills Corp.'s Mimi de France girdle package which won the President's Award of The National Flexible Packaging Association.

Paramount chose the Kidder Filmprinter to print this transparent polyethylene bag-package flexographically in six colors.

While "Making Good Impressions Faster" with this Kidder Press, Paramount, like all Kidder customers, received the additional guarantee of superior press operation supplied by Kidder's Performance Engineers.

These printing experts install each new press, tune it to top running order and educate your pressmen to get its full and finest production.

Find out what this type of service can do for *you*.

Contact Kidder Press Company, Inc., Dover, N. H. Eastern Sales Office: Empire State Bldg., New York 1, N. Y. Mid-West Sales Office: 400 Washington Bldg., Madison 3, Wisconsin. West Coast Representative: Bojanower Machinery Service Corp., 5270 E. Washington Blvd., Los Angeles 22, California.

Make Good Impressions Faster with

Kidder

Flexoprinter,® Letterpress, and Gravure Presses, Slitters and Rewinders

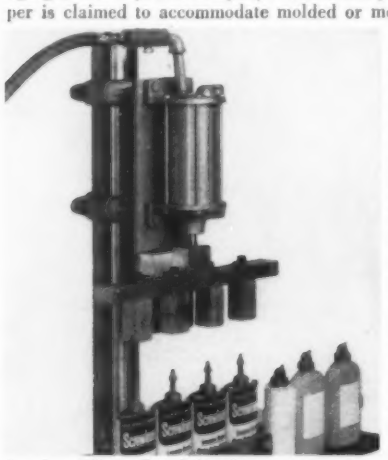
to develop such packaging. Decorative coverings, including fabrics, flocked materials and a wide range of printed surfaces ranging from full-color lithography to embossed papers, can be provided, the company says. One such container now available is an 8-in.-diameter metal drum container that can be re-used as a permanent cosmetic kit. A mirror is adhered to the inside surface of its hinged cover. The container is offered with made-to-order compartments in a choice of materials. It also is available in a variety of other shapes (including rectangular) and packaging materials, and in any type of exterior treatment, the supplier claims. *Atlantic Can Co., Delawanna, N.J.*

Long-stroke injection molder

An injection-molding machine claimed to offer the longest adjustable stroke commercially available has been introduced by Lester-Phoenix. The L-225-6/9 Ounce Lester has a stroke range of 16 to 8 in., with a total daylight of 38 in. Drying cycle on an 8-in. stroke is 4 sec.; for a 16-in. stroke it is only 5 sec., the supplier says. The machine, whose clamping tonnage is 225 tons, comes with three die-height spacer rings, for adaptability to a variety of mold sizes. According to the company, nominal shot size of the machine is 6 oz. on a single feed and 9 oz. on a double feed, but it has been tested and proved effective on a 12-oz. shot. Plasticizing capacity in general-purpose polystyrene is rated at 150 lbs. per hour. *Lester-Phoenix, Inc., 2711 Church Ave., Cleveland 13.*

Line of fillers and closure appliers

Scientific Filter Co. reports the availability of a line of packaging machinery. The company's Whirlwind portable screw capper is claimed to accommodate molded or metallic screw caps for any type of glass, metal or plastic container. The unit assures uniform, leakproof seals, the supplier says. Also available is the Accu-Measure volumetric piston filler, which dispenses pre-set amounts of liquid or semi-viscous products. Accurate filling with the total exclusion of air is achieved, the supplier claims.



Another filler offered by the company is a portable vacuum-filling machine with automatic supply can. It is designed for long or short runs of liquid products. The supplier also offers an air-operated, semi-automatic unit (shown here) for applying plastic dispensing spouts to cans of lighter fluid, household oils and other products. After the operator places a spout on the neck of a container, it is positioned under an air-operated cylinder. Attached to the cylinder is a set of slotted press bars which descend when air pressure is released to force the container spout securely into place. *Scientific Filter Co., 56A Rose St., New York 38.*

Paper cutter with automatic spacer

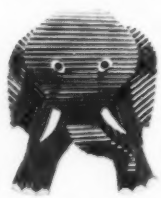
Designed for fast, semi-automatic cutting of stacked sheets of labels and other printed papers is Challenge Machinery's Model 193 Power Paper Cutter. Test runs show as much as a 50% saving in cutting time, the supplier says. The unit has an automatic spacer. It operates from a punched tape which is prepunched to the desired space setting. After the operator cuts the paper, a back gage automatically moves the stacked sheets forward to the next cutting position as indicated by the spacer. The machine has a 19-in. cutting knife. *The Challenge Machinery Co., Grand Haven, Mich.*

MEET THE COMPLETE
KRAFTSMAN family:
a full, high quality Containerboard line to meet every need and specification—with efficiency and economy.

Kraftsman Dura-Bend Liner

Kraftsman Whiteliner

Kraftsman Superliner



Kraftsman Dura-Corr

Kraftsman Weather-Tite Liner and Weather-Tite Dura-Corr

KRAFTSMAN DURA-BEND LINER

eliminates scoreline cracking

Even when folded to 180°, Dura-Bend Liner won't crack. You cut costs because there's no need to wet the board prior to scoring at the corrugator or printer slotter or before folding. Also, it eliminates costly plant humidifying equipment.

Kraftsman Dura-Bend Liner retains all the toughness and rigidity of regular liner. It has even been used successfully in boxes up to 1000# test!

It costs no more than ordinary liner! These remarkable and economic results are achieved by laminating Kraftsman liner to the new Kraftsman Clupak* paper with its built-in "stretch" and toughness. For samples and more information, call or write.

*Clupak, Inc.'s trademark for extensible paper manufactured under its authority.

CONTAINERBOARD SALES, KRAFT DIVISION

WEST VIRGINIA PULP AND PAPER COMPANY

230 Park Avenue, New York 17, N. Y.

Plants & People

C. H. R. Johnson becomes pres. and gen. mgr. of **Consolidated Paper Co.**, Monroe, Mich., maker of corrugated and fibre shipping containers, folding paper boxes and allied products. He succeeds **Clement Q. Baron**, retired.

Richard L. Siegel has been promoted to pres. of the **Gardner Div.** of **Diamond Gardner Corp.**, New York. He succeeds **Colin Gardner**, who has become div. chairman. Mr. Siegel joined the former Gardner Board & Carton Co. in 1949 as director of industrial and public relations. Later, he assumed the additional duties of asst. to the v.p. and gen. mgr. After the merger with Diamond Match in 1957, he was made v.p. and gen. mgr. of the Gardner Div.

Siegel *Ecclesine*

T. C. Ecclesine has joined the Gardner Div. as director of mktg. services. He will be in charge of all sales functions, including mdsng. and sales service. **William Duggan** becomes supervisor of mdsng. for the division.

Wood

John E. Wood, III, has been named pres. of **Enjay Co., Inc.**, New York, marketer of petrochemical products. New v.p.'s are **Karl J. Nelson**, **Harold J. Rose** and **A. Donald Green**. Enjay's exec. v.p. and director is **A. Bruce Boehm**, who has held the post for two years.

Three executive promotions have been made by **Plax Corp.**, Hartford, Conn. They are: **W. E. Gamron**, from product mgr., containers, to sales mgr., industrial and stock containers; **C. N. Sprankle**, from product mgr., film and sheet, to product mgr., sheet and formed containers, and **John W. French**, from product-development mgr. to product mgr., film.

Polymer Industries Inc., Springdale, Conn., reports that a plant-expansion program planned for 1959 will double its present manufacturing, laboratory and office facilities. Polymer's chemical-specialty products are used widely in adhesives for the production of foil laminates and similar applications.

Aero-Chem Laboratories, Inc., a new company for the specialty packaging and filling of aerosol products, has been established at 1985 State St. Ext., Bridgeport 5, Conn. Emphasis will be on the contract packaging of cosmetics and other aerosol products requiring metered dispensers, reports **Charles O. Rader**, pres. of the company. Other executives of the firm are: **Andrew Zelle**, exec. v.p. and gen. mgr. in charge of engineering design and product development, and **John Sullivan**, treas. and asst. to the pres. All three men were formerly with **Connecticut Chemical Research Corp.**

Production facilities offered by the new company include: a production line geared to handle 20,000 bottles and cans per shift, a line for small metered dispensers that can accommodate 15,000 containers per shift, and an additional pressure-filling line to handle water-base products with liquefied-gas or nitrogen propellants.

R. E. Delaplane becomes gen. sales mgr. of **Metro Glass Co.**, Jersey City. He was formerly beverage-industries sales mgr. in the Glass Container Div. of **Owens-Illinois Glass Co.**

A new converting company, **Precision Carton Co.**, has been formed by **East Texas Pulp & Paper Co.** Located in Aurora, Ill., the company has been licensed to make Ex-Cell-O Pure Pak milk-carton blanks, using Eastex paperboard and converting machinery supplied by **Ex-Cell-O Corp.** Officers of the new company are: pres.—**Robert A. Morris**; board chairman—**R. M. Buckley**; v.p.-sales—**Judson D. Browne**.

Henry Lang becomes exec. v.p. of **The Hamersley Mfg. Co.**, Garfield, N. J. He was formerly v.p. in charge of production and has been with Hamersley 28 years. The company makes glassine, greaseproof and waxed paper.

Rudy

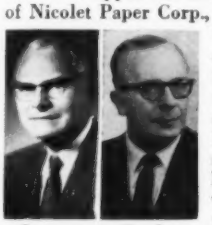
Henry C. Rudy, director of merchandising for **Owens-Illinois Glass Co.**, Toledo, O., has been named v.p. and gen. sales mgr. for the company's Paper Products Div. Mr. Rudy joined O-I in 1934 as a sales representative. For six years before being named to head company merchandising, he served as mgr. of the Prescription Ware Division.

The Display Div. of **Gibraltar Corrugated Paper Co.**, Jersey City, has announced an expansion program. According to the div., expansion plans call for the introduction of new production techniques with emphasis on increasing the variety and quality of printing methods on corrugated paperboard.

Harry C. Byrne has been named asst. to the v.p. of the Plastics Div. of **Visking Co., div. Union Carbide Corp.**, Chicago. Mr. Byrne, who joined the company in 1951, formerly served as sales mgr. for the Eastern Division.

Harold J. Brunette has been appointed to the new position of production planning and packaging mgr. for **John H. Breck, Inc.**, Springfield, Mass. He will be responsible for planning and scheduling of production, inventory control and packaging operations at the toiletry company's West Springfield plant.

Arthur Snapper has been elected pres. of **Nicolet Paper Corp.**, West De Pere, Wis. He succeeds **William Heller, Sr.**, who remains a member of the board. At the same time, **Henry Fowler** was elected v.p. of the company, Mr. Snapper's former position. Mr. Fowler had been gen. mgr. since 1955 and will retain both the title and duties of that post. Nicolet makes glassine paper.



Snapper *Fowler*

H. C. Lange, former exec. v.p., becomes pres. of **Weston Paper & Mfg. Co.**, Dayton, O. He succeeds **Ward S. Hubbard**, now board chairman. Mr. Hubbard continues as pres. of **Wabash Fibre Box Co.**, a sub. of Weston. **M. T. Hubbard**, v.p. and gen. mgr. of Wabash, becomes also exec. v.p. of Weston, succeeding Mr. Lange. Other new Weston executive appointments are: **C. H. Hutchins**, to v.p.-director of mktg., and **C. D. Altick, Jr.**, to v.p.-sales.

American Box Board Co., Grand Rapids, Mich., has established an Agricultural Marketing Dept., whose purpose is to provide trained packaging engineers to aid produce packagers in Minnesota, Illinois, Wisconsin, Missouri, Michigan and adjacent areas. The dept. is managed by **Robert Blett**, agricultural packaging specialist. According to the company, its new service will enable it to meet the growing general demand (and individual requirements) for protective and promotional packaging.

Jack H. Dollinger becomes pres. of **Ferro Chemical Corp.**, Bedford, O., a sub. of **Ferro Corp.** The company makes stabilizers for plastics.

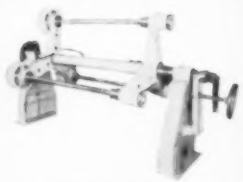
William U. Funk has been appointed polyethylene sales-development engineer for **U. S. Industrial Chemicals Co., Div. National Distillers & Chemical Corp.**, New York. He will be mainly concerned with developing applications of "Petrothene" in the flexible-packaging field. Mr. Funk, who has been with

SAILBOAT BRAND®
Bleached Sulphate Board
is master in its class!...
unexcelled in quality of food container board,
linerboard, cup stock and specialty board
produced in St. Marys, Georgia,
in an exclusive-process plant,
entirely of virgin pulp.
May we send you samples?
Cup Stock
that combines
perfect bead
with strong resistance
to hot or cold
liquids.
SAILBOAT
Gilman
PAPER CO.
Gilman Paper Company
3 Generations of Paper Making
New York: 630 Fifth Avenue • Chicago: Daily News Bldg.

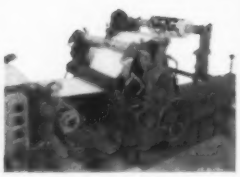
Dilts

CONTINUOUS UNWINDS AND WINDS FOR PRINTING PRESSES

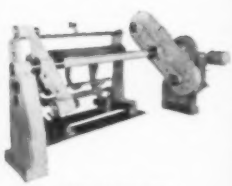
MODEL 20F UNWIND



MODEL 20-17 UNWIND



SURFASTART WINDER



MODEL 20 WINDER

Write or phone for full information

THE BLACK-CLAWSON COMPANY
DILTS DIVISION
Fulton, N. Y. • LYric 2-4265

Plants & People

the company since 1956, is a member of the Society of Plastic Engineers and the Technical Assn. of the Pulp & Paper Industry.

Sellery

Robert A. Sellery has been appointed Eastern sales mgr. for **Mead Containers, Inc.**, Cincinnati, sub. of **The Mead Corp.** He was formerly asst. sales mgr. for **Evert Container Corp.**, an affiliate of Mead Containers. Mr. Sellery, who has been associated with the container industry for more than 22 years, will be headquartered at Mead's New York office.

A new contract and private-label aerosol-packaging company has been formed by **Ira A. Wolfson**, who was formerly with **Du Pont's** Freon Products Div. The new company, **Pace Inc.**, is located at 901 Washington St., Wilmington 1, Del. Mr. Wolfson, who is pres. of the company, reports that its first pressure-fill line went into operation last month.

Grace Gilbert, former packaging specialist and mgr. of special projects for **Revlon, Inc.**, has established a packaging-consultation service under her own name. Miss Gilbert reports that her services, available to packagers in many lines, will include merchandise policies, production techniques and costs, pricing and marketing trends and package design. Address of the new firm is 1135 Pelham Parkway, New York 69. Telephone number is TUlip 2-9637.

The most advanced methods of handling, packaging and conveying will be incorporated into its new milk and ice-cream plant in Milwaukee, reports the **Borden Co.**, New York. According to the company, milk will be processed and bottled at the rate of 800,000 lbs. per day, and ice-cream production capacity will be approximately 3,000,000 gals. per year.

J. Donald Scott is the newly appointed gen. mgr. for the special products group of the Folding Carton Div. at **Container Corp. of America**, Chicago. Mr. Scott will direct the division's marketing efforts in packaging for beverages, frozen foods, dairy and meat products, bakery goods and fresh fruits and vegetables. **James F. Carty** succeeds Mr. Scott as gen. mgr. of the company's Chicago carton plants. **E. F. Bickley, Jr.** has taken over the newly created post of gen. sales mgr. for folding cartons in the New York office. **R. Harper Brown** succeeds him as gen. sales mgr. of Container Corp.'s Philadelphia carton plants.

Scott

Leonard F. Albers has been named sales mgr. of **Garmold, Inc.**, a sub. of Container Corp.'s recently acquired **Sefton Fibre Can Division.**

Stanley Barnett is now asst. product mgr.-sales in the polyethylene div. of **Equitable Paper Bag Co.**, Long Island City, N. Y. He was formerly with **Wrapture, Inc.**, as a regional sales mgr. and was also previously associated with **Oneida Paper Products Co.**

Allen B. Wrisley Co., Chicago, a sub. of **Purex Corp.**, has elected **Eugene F. Bertrand** as pres. and director of sales. He succeeds **Wrisley B. Oleson**, who becomes chairman of the board. Mr. Bertrand also has been elected a v.p. of the parent company.

The Center for Research in Marketing, Peekskill, N.Y., reports the availability of a new service for assessing the visual and psychological effectiveness of a package. Called "C.R.M. Package Evaluation," the service will be handled by a newly organized Perception Laboratory, which is said to employ a number of unique psychological measurements and devices. In the laboratory, package testing will be done in two areas: perceptual dynamics (impact, legibility, product relatedness and dominant packaging elements) and emotional dynamics (product quality projected, user image projected and brand image).

McNamara

Fred B. McNamara has been promoted to Central Div. sales mgr. for **National Can Corp.**, Chicago. **S. V. O'Donnell**, as his asst., will specialize in account development. **R. B. Ganung** has succeeded Mr. O'Donnell as sales mgr. for the Chicago district. **Ben F. Batcheler** has been appointed sales mgr. for the Wisconsin-Michigan-Minnesota district and **C. O. Wood** will handle the Ohio-Central Indiana area.

Chicago Carton Co., Chicago, last month observed its 50th anniversary. Its founder, **Ralph R. Richardson**, still is actively connected with the company as chairman of the board.

This year, celebrating the centenary of its establishment, **Johns-Manville Corp.**, New York, has put seven new factories into production. The **Johns-Manville Dutch Brand Div.**, Chicago, is operating the facility most recently completed. According to the company, its capacity increases by more than 50% the div.'s output of pressure-sensitive tapes and adhesive products.

First shipments of cellophane have already left its new production facility at Marcus Hook, Pa., reports **American Viscose Corp.**, Film Div., Philadelphia. The plant, with a rated annual capacity of 50,000,000 lbs., is geared to produce standard types of cellophane as well as polymer resin-coated films. A giant instrument-control center is reported to insure precise quality control in the manufacturing process.

American Can Co., New York, has opened a new coil plant in Hillside, N.J. It is the eighth plant for processing tin plate from coil stock to be

HEAT SEAL LABELS

FOR Cellophane Polyethylene Saran

2 Color * $1.98 per M

3 Color * $2.46 per M

You do NOT have to Buy Large Quantities to Get this Price. As little as 6M Each of 4 Kinds can be ordered.

Will Seal to all 3 Films by varying heat.

2 Colors *Sizes up to 5⅛" x 4" (When Labels are held in stock or stock design is used) 1 Background Color and Type in 2nd Color. 3 Colors *Sizes up to 5⅛" x 4". 2 Color Background and Type in 3rd Color. All in 70 Pound Stock.

PRINTED BAGS - PLAIN

CELLOPHANE POLYETHYLENE SARAN K203

POLY BAGS: 4" x 10", $5.70 per M; 5" x 10", $6.10 per M; 6" x 10", $6.95 per M. These prices are on 2 Mil and quantities of 10 M or more. Write for prices on other sizes and films.

LABELS & DECALS, INC. 4882 W. Grand Ave. Chicago 39, Ill. NAtional 2-3030

NEW CADY MICROMETER

for calipering in Ten-Thousandths of an Inch

This precision instrument supplies accurate thickness readings for plastic films, foils, papers, any thin sheet stock up to .050". Immediate Delivery. Write for complete information and price.

E. J. CADY & COMPANY

658 N. Harlem • River Forest, Ill.

THE MOST BEAUTIFUL POLY PACKAGE... is a tight-to-product Edge-Sealed Polyethylene Package!

produced automatically on the

AMSCOMATIC 100 CONVEYOR / SEALER

A new, exclusive development for tight-to-product poly bag packaging.

Illustrated is an AMSCOMATIC 100 Sealer and Swivel Bed Conveyor feeding soft goods horizontally.

- Low operating costs. (No operators at sealing machine.)
- High production speeds (variable to over 1000 linear inches per minute.)
- Quick changeover sealing head for cellophane bag sealing available.
- Swivel mechanism provides for sealing rigid materials vertically.

Write for details and list of users.

Amsco

AMSCO PACKAGING MACHINERY, Inc.

31-31 48th Avenue • Long Island City 1, N. Y.

REPRESENTATIVES IN PRINCIPAL CITIES

WITH IMS SILICONE SPRAY YOU GET

12 FREE CANS

For each gross purchased.

LOOK FOR YOUR FREE BONUS CARD IN EACH BOX!

KEEP YOUR MOLD RELEASE COSTS DOWN

IMS Silicone Spray is specially designed to eliminate sticking problems in the molding and in the food and packaging fields. With the exclusive all-metal, fast acting spray head you get finer atomization every time—conserves costly silicone and goes much further than many other cans using cheaper spray heads—Remember, look for your FREE BONUS card in every box.

PRICES
$2.00 single can
$18.00 per dozen
$197.40 per gross
F.O.B. YOUR PLANT.

IMMEDIATE DELIVERY

INJECTION MOLDERS SUPPLY COMPANY
3514 LEE ROAD • CLEVELAND 20, OHIO

Plants & People

opened by the company in the past 18 months. It also marks the completion of Canco's capital-expansion program, which cost $32,000,000.

Product Counselors, Inc., a new company to provide services to packagers, has opened at 145 E. 57 St., New York. Its pres. is **Jack Wachtel**. Among the services which the company says it is equipped to offer is the creation of "new basic packaging concepts, with new forms and new practical consumer selling appeals that, in effect, give an old product a new personality."

Hanofee

James S. Hanofee has joined **Packaging Equipment Co.**, Long Island City, N. Y. He will supervise sales operations in all branch offices from the headquarters office. Mr. Hanofee formerly operated a consulting firm dealing with package design, production and marketing.

A new foil-container plant has been opened in Fort Calhoun, Neb., by **Revere Copper & Brass, Inc.**, New York. The company reports that it is now able to produce any type of aluminum-foil container requested by customers. The plant has 30,000 sq. ft. of productive capacity.

Frederick S. Brennan becomes gen. partner of **Latham-Tyler-Jensen**, design consultant, Chicago. He was formerly v.p. of **Raymond Loewy Associates**, design firm.

Geiger

C. Gregg Geiger has been promoted to the post of gen. sales mgr. of **Johns-Manville's** industrial-tape manufacturing division—**Dutch Brand Div.**, Chicago. He was formerly merchandise mgr. for the div., having been appointed to that position in 1950 after three years with the company as a market analyst. Mr. Geiger is pres. of the **Pressure-Sensitive Tape Council** as well as being a member of the **American Marketing Assn.**

Crowell Carton Div., St. Regis Paper Co., has installed new letterpress equipment at its plant in Marshall, Mich. According to Crowell, the new machinery results in printing performance on paperboard that is the equal of lithography in appearance and economy.

Plastic Papers, Inc., is the new name of the former **Plastic Coated Paper Corp.**, New York. The company reports also that a new plant under construction in Hicksville, N.Y., will provide a wide variety of polyethylene-coated papers and foil laminations for packaging use.

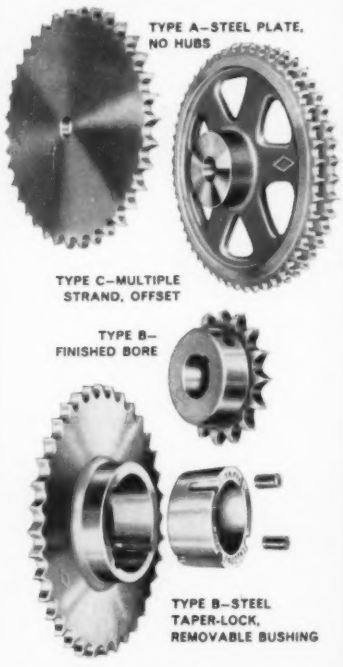
Construction of a multi-million-dollar research center at Golden Valley, Minn., will be begun this spring by **General Mills, Inc.**, Minneapolis. According to

FOR EVERY NEED

DIAMOND

MINIMUM BORE AND READY-TO-USE

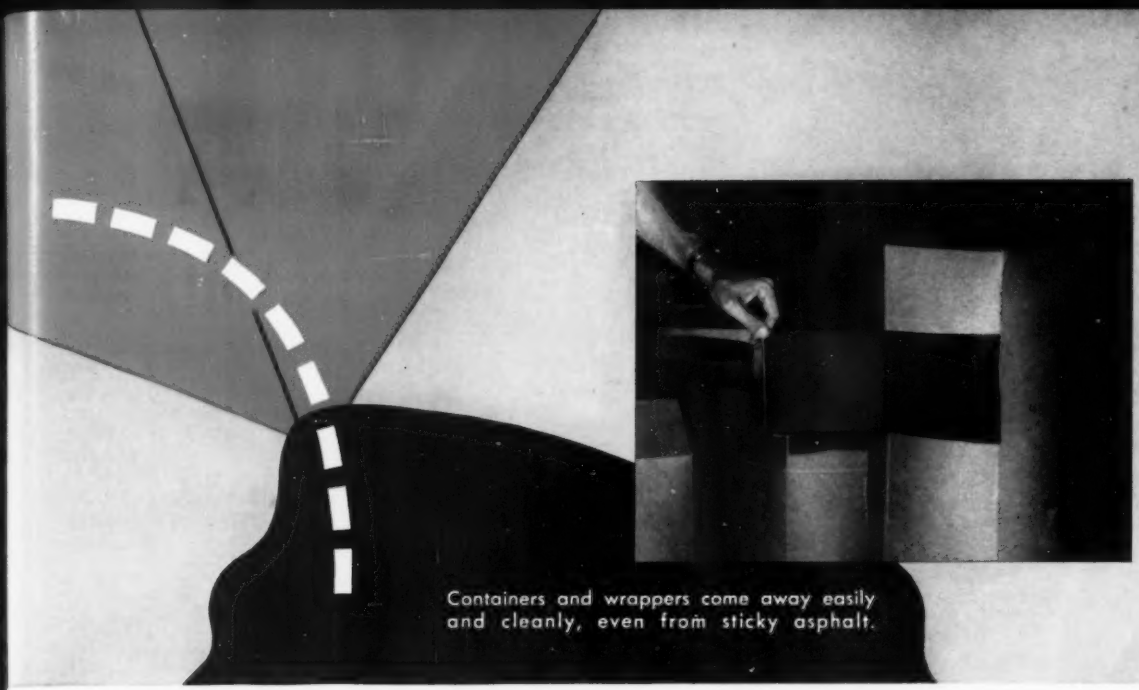
STOCK SPROCKETS



Write for Stock Roller Chain and Sprocket Catalog

Get complete information on DIAMOND'S full line of sprockets available from your Distributor's stock! 68-page catalog contains dimensions and list prices; bushing installation and removal instructions. Write for your copy today!

DIAMOND CHAIN COMPANY, INC.
A Subsidiary of American Steel Foundries
Dept. 621 · 402 Kentucky Ave.
Indianapolis 7, Indiana



Containers and wrappers come away easily and cleanly, even from sticky asphalt.

Nothing Sticks to Paper

COATED WITH A SYL-OFF COATING†

If you store, handle or package sticky products, you and your customer can speed up production and processing, keep quality high, and save on shipping costs too, — by specifying paper coated with one of the new Syl-off* silicone paper coatings developed by Dow Corning.

Paper and paperboard, from glassine to boxboard, coated with Syl-off, have excellent anti-adhesive characteristics. Even the gummiest of materials . . . adhesives, asphalt, candy, glue, unvulcanized rubber . . . are easily, quickly, and cleanly removed from wrappers or interleaving sheets coated with Syl-off.

Applied to paper, a Syl-off coating does not alter the stock, will not migrate or transfer, and will not contaminate packaged products.

Applied one or two sides, depending on the proposed use, Syl-off coatings are effective, permanent, and economical. What's more they're lighter in weight than conventional release coatings, which means additional savings in shipping costs.

Investigate the use of paper coated with Syl-off. Write for free samples, full information and list of suppliers.

†We're sure there must be exceptions, but of the more than 100 materials tested to date, none has been found to stick — except a silicone adhesive.

DEPT. 7313

first in silicones

Dow Corning CORPORATION
MIDLAND, MICHIGAN

ATLANTA BOSTON CHICAGO CLEVELAND DALLAS DETROIT LOS ANGELES NEW YORK WASHINGTON, D.C.

*TM DOW CORNING CORPORATION

...and NOW it's sugar

California and Hawaiian
Sugar Refining Corp.
has added
SEAL-SPOUT

. . . aluminum pouring spouts to their colorful packages of granulated cane sugar *for consumer preference.*

No longer will users be annoyed by spilled sugar. Now they can pour C & H right from the package into sugar bowls, measuring spoons or sprinkle it directly on their cereal.

SEAL SPOUT Corp.
MOUNTAINSIDE, NEW JERSEY

Plants & People

A. D. Hyde, the company's v.p. in charge of research, the new center will provide facilities for exploration into wider diversification and into new high-nutrition, high-convenience food products, as well as for increased emphasis on basic research.

U. S. Industrial Chemicals Co., Div. National Distillers & Chemical Corp., New York, played host last November to 24 U.S.I. polyethylene export agents from all over the world at a seven-day conference. They came to the U.S. to be briefed on the latest developments in polyethylene technology and to discuss rapidly growing polyethylene markets here and abroad.

Cromwell Paper Co. has moved its general offices to 180 N. Wabash Ave. in Chicago.

International Paper Co., Bagpak Div., New York, has shifted its market-research and product-development operations from Camden, Ark., to New York. **W. L. Shoemaker** has been named mgr. of these activities, which will now be carried out in conjunction with International's Market Research & New Products Dept.

A $3,000,000 rotogravure building has been opened in Lockland, O., by **The Gardner Div., Diamond Gardner Corp.,** Middletown, O. The building, which houses four gravure presses printing up to six colors each, is reported to more than double the div.'s capacity for the production of folding cartons.

A planned expansion of its polypropylene production facilities is reported by **Montecatini,** Milan, Italy. The company's plant at Ferrara will be expanded to enable it to produce 20,000 tons annually; the Terni works eventually will be turning out 5,000 tons of the plastic material per year.

The California Div. of **Pantasote Co.,** New York, has moved from Los Angeles to 4703 E. 48 St., Vernon.

Zellerbach Paper Co., San Francisco, has set up a Premium Service Dept., to be headed by **Robert Hunt Ziegler.** The new dept. is designed to develop, warehouse and distribute premiums and premium packaging.

Two additional companies have been named as sales reps. for the **Plastics Machinery Div. of National Automatic Tool Co.,** Richmond, Ind. The div. makes Natco plastics injection-molding machinery. New reps. are **Four States Machinery Co.,** Chicago, for the Chicago-Milwaukee area, and **McIntyre Machine Sales Co.,** Worcester, Mass., for New England.

A new plant for the production of packaging papers is being built by **Wyomissing Paper Products Div., The Narrow Fabric Co.,** Reading, Pa.

Pneumatic Scale Corp., Ltd., Quincy, Mass., has licensed the manufacture

Don't try to talk... let Crocker full color lithography sell for you.

PACKAGING
LABELS
FOLDING CARTONS
SALES LITERATURE
ADVERTISING POST CARDS

H. S. CROCKER CO., INC.

PLANTS: SAN BRUNO, CALIF. · BALTIMORE, MD.
SALES OFFICES: 720 MISSION, SAN FRANCISCO
1151 W. 6TH, LOS ANGELES · 350 N. CLARK, CHICAGO
23 E. 26TH, NEW YORK · ST. PAUL & 24TH, BALTIMORE, MD
16801 WYOMING, DETROIT · 5673 OGONTZ, PHILA.
1328 S. W. 13TH, PORTLAND, ORE. · 322 COLMAN BLDG., SEATTLE, WASH
JACKSON, MISS. · WINTER HAVEN, FLA · MINNEAPOLIS, MINN. · OMAHA, NEBR.

Preferred
FOR
PRECISION
AND
PERFORMANCE
THE
ARENCO g.a.b.
TUBE FILLER

The Arenco GAB is more than a machine — it is a method — the fastest and most efficient known for high speed tube filling production.

Every hour, this Arenco GAB fills and closes up to 3,000 collapsible tubes, depending on material. It positions, tightens cap, codes and discharges to conveyor line. All the operator does is load!

OTHER FEATURES INCLUDE:

Product viscosity maintained
Positively clean tubes
Quick change of product or tube size
All parts accessible for easy sterilization
Fully adjustable for volume variation
No-tube, no-fill
Adaptable to almost any type of closure

Advanced engineering and production know-how makes Arenco a truly modern filling machine — available at a practical cost. Facts that tell the complete story are yours for the asking. Write for them today!

ARENCO
MACHINE COMPANY, INCORPORATED
25 West 43rd Street • New York 36, N. Y.

Plants & People

and sale of its packaging and bottling-line machines in England. The machines will be made by **Vickers-Armstrongs, Ltd.**, and sold by **Rockwell Pneumatic Scale, Ltd.**, both of London.

Averil, Inc., Miami-based contract packager of toiletry and chemical specialties, has moved into a new plant and warehouse facility located at 6780 N.W. 37th Court.

George W. Millar & Co., New York, has been named as a distributor of the protective packaging materials manufactured by the **Cel-Fibre Div., Personal Products Corp.**, Milltown, N.J.

A new adhesive-manufacturing plant will be built in Fairfax, Kans., by the **H. B. Fuller Co.**, St. Paul. It will be ready for occupancy next month, according to the company.

A Minneapolis branch office has been opened at 823 Marshall St. N.E. by **Sinclair & Valentine Co.**, New York. **Kenneth Lambert** has been named branch mgr. by the printing-ink maker.

Construction of a plant to produce steel shipping pails has been begun in Vancouver, B.C., Canada, by **Vulcan Containers, Inc.**, Bellwood, Ill. The pails are designed for the packaging of paints, chemicals, adhesives, oils and similar products, the company says.

Anchor Hocking Glass Corp., Lancaster, O., has shifted its Indiana Container & Closure Div. office from Terre Haute to Indianapolis.

A company to manufacture and sell its line of packaging machinery in Europe has been organized by **General Corrugated Machinery Co.**, Palisades Park, N.J. The new company, General Corrugated Machinery Co., G.M.B.H., has its sales offices in Hamburg, Germany.

Continental Can Co., New York, has begun operations at its new Paper Container Div. plant in Three Rivers, Mich. The plant manufactures paper food containers and paper hot- and cold-drink cups.

Smith, Scherr & McDermott, Akron, O., industrial-design firm, has opened a New York office at 10 W. 56 St.

Promotions

Robert H. Lucas: to Great Lakes regional mgr. for foil and containers; **Robert F. Watson:** to asst. product mgr., **Kaiser Aluminum & Chemical Sales, Inc.**, Foil & Container Div., Chicago.

Stanley L. Oberg: to div. gen. sales mgr. for corrugated shipping-container plants in the West Coast, Southwest and Midwest, **Container Corp. of America**, Chicago.

J. Tatnall Lea, Jr.: to mgr. of Southeastern sales; **Noel R. Phillips:** to technical coordinator of Carolina paper sales, **Riegel Paper Corp.**, New York.

Carlton Mellick: to director of sales for **The Dexter Co.** and **The Lawson Co.**, both Pearl River, N.Y., both divs. of **Miehle-Goss-Dexter, Inc.**, Chicago. Mr. Mellick also continues as v.p. of sales for **The Miehle Co.**

Edward J. McClure: to director of purchasing, **Crown Cork & Seal Co., Inc.**, Philadelphia.

Charles E. Finsilver: to v.p., **Lippincott & Margulies, Inc.**, industrial designer, New York. Mr. Finsilver joined the company in 1952 and became director of its package-planning dept. last February.

D. B. Wiesley: to director of staff, **Continental Can Co.**, Metal Div., New York. He will coordinate and direct various staff departments.

James G. Jackson: to St. Louis branch sales mgr., **Chase Bag Co.**, Chicago.

Ardmore M. Willer: to sales mgr., **West Instrument Corp.**, Chicago. The company makes temperature-control and recording instruments which are used in packaging-industry applications.

Ralph F. George: to acting gen. mgr., Western area, **General Package-Foodtainer Div., Diamond Gardner Corp.**, New York. He will handle sales and manufacturing activities for the company's molded-pulp products. **Eric G. Erickson:** to asst. to the v.p. of Diamond Gardner's General Products Group.

Kenneth J. Carson: to v.p. and Atlantic district mgr., Finishes Div., **Interchemical Corp.**, New York.

Appointments

Dick Luchtman: to chief packaging design and development engineer, Packaging Div., **Blocksom & Co.**, Michigan City, Ind.

Felix La Mar: to Western mgr., **Modern Engraving & Machine Co.**, Hillside, N.J. The company manufactures embossing machines and embossing rolls used by converters of paper, foil, glass and plastics in packaging applications. Mr. La Mar is headquartered at Palo Alto, Calif.

Steven J. Parrot: to project director, **Jim Nash Associates, Inc.**, New York. He will assist clients in relating their design-development programs to current marketing conditions in the U.S. and Canada, says the company.

Landon L. Rogers: to exclusive rep., **Harder Partitions, Inc.**, Dundee, Ill.

H. H. Deputy: to product mgr. in charge of sales of asphalt-laminated and asphalt-reinforced papers, **Cromwell Paper Co.**, Chicago. **L. S. Ralph:** from **Chase Bag Co.** to product mgr. in charge of mattress-bag and multiwall-bag sales for Cromwell.

Don Schary: to director of sales prom. and public relations, **Par Industries, Inc.**, Los Angeles. The company packages aerosol products.

imagine for only $179.50 plus F.E.T.

Transcribing accessories at slight extra cost.

a complete electronic "all-in-one" dictating-transcribing machine

DeJUR GRUNDIG

Stenorette®

The Electronic Stenorette®

—the first really new dictating machine in 18 years!

More than 300,000 now in use. Only **STENORETTE** carries the label of Fire Underwriters' Laboratories. Your guarantee of the highest safety standards.

Dictate, transcribe, erase, correct, start again after an interruption, repeat a word or an entire report, *all with a flick of the convenient "mike" button.* **STENORETTE speeds your work, prevents mistakes, saves you valuable hours each day. Here's everything you've always wanted in a dictating machine—***at half the cost of other dictating machines!* **It's a fully-equipped, precision business machine that actually** *pays for itself* **in more-accurate, faster on-the-spot operation!**

MORE THAN 300,000 NOW IN USE! Executives everywhere prefer the STENORETTE to any other dictating machine *regardless of price.* STENORETTE gives you all the features of units costing twice as much – plus these advantages: Safety-control automatic error erasure, dual function dictator and transcriber, re-usable tape, and many others you can't get elsewhere at any price. COMPLETELY PORTABLE: weight 11 lbs. 10 oz. Just plug it in—at home, in office, even in a *moving car.* It's always ready when you are. PUSH-BUTTON CONTROL: easiest machine for you—and your secretary too!

SEND THIS AIRMAIL CARD TODAY FOR FREE BROCHURE

No postage required. Please send no money. Turn the page for more exciting details.

DeJUR-AMSCO CORPORATION, Dept. 000, 45-01 Northern Blvd., Long Island City 1, N. Y.

Please rush, without obligation, a copy of your FREE BROCHURE explaining how the Stenorette can make my office work go faster, more efficiently, and more accurately.

PLEASE PRINT

Company_____

(If you are interested for personal use, ignore this line)

Address_____

City_____ Zone____ State_____

Individual_____

Title_____

☐ Send me name of nearest Stenorette Sales/Service Center.

☐ Also send me details on the new DeJUR-TRIUMPH Typewriters.

AT LAST!

Push-Button error-free dictation at a price everyone can afford

HOW OFTEN have you seen a *price* in an ad for a complete dictating machine? Probably never. In fact, other manufacturers, realizing that their prices are so high, leave out all mention of purchase price or suggest that you can *rent* their machines. But you can own your Stenorette—because this electronic miracle sells for half the price of comparable major dictating machines. *It even costs less than a standard office typewriter!* That's why every office—even the smallest—can afford a Stenorette.

only **$179.50** plus F.E.T.

Transcribing accessories at slight extra cost.

COSTS LESS...ACTUALLY DOES MORE! Despite its amazingly low price, the world-famous Stenorette does everything the highest-priced units do—and more! It gives you every control, every time-saving convenience you can think of. And, because it's the most modern of all dictating machines, it's the easiest, simplest, fastest of all to use. Imagine! You dictate onto revolutionary magnetic tape—the finest medium for recording the human voice. And you erase with the *automatic* Safety-Control error erasure. Just re-record over the words to be corrected. You can dictate continuously up to 45 minutes. You never have to worry about expensive resurfacing and/or replacement needed for old-fashioned belts, discs, and cylinders. And Stenorette's foolproof PUSH-BUTTON CONTROLS make every step automatic.

FREE BROCHURE SHOWS HOW THE STENORETTE HELPS YOU "TALK" PAPER WORK AWAY.

Illustrated book *tells* and *shows* you how to do more really productive work in less time with the DeJUR Grundig Stenorette®. *Quantities are limited, so get your request into the mail now.*

DICTATE AND TRANSCRIBE WITH ONE MACHINE! A single Stenorette does it all. Just plug in the sensitive "mike" with finger tip Safety Control and dictate. Transcribing accessories designed for convenience and comfort of secretaries are used with same machine.

REALLY PORTABLE...WORKS ANYWHERE! Amazing Stenorette weighs only 11 pounds, 10 ounces, takes no more desk space than your briefcase. Stenorette's special design allows perfect operation in a moving car. (There's no "needle.") Exclusive "Conference" setting lets you record as many voices as you wish. Simple attachment lets you record telephone calls, too.

MOST SENSITIVE DICTATING MICROPHONE. Another Stenorette exclusive. Shout or whisper—hold the microphone wherever you wish. Your voice will play back clearly at its natural level.

USE THE SAME TAPE OVER AND OVER AGAIN! Dictate up to a full 45 minutes on miracle DuPont Mylar* tape. Transcribe. Start again with the same tape if you wish. Stenorette is as economical to use as it is to buy.

REMOTE-CONTROL ERASER! Make changes without touching the machine. Relax in your chair, press the button on the "mike," listen to your last words—and *record the correct words right over the error*, thanks to safety control erasure.

FOOLPROOF INDEXING! Typist knows exactly where to start listening, where to enter separately recorded changes, etc.

CHOICE OF TRANSCRIBING ACCESSORIES. Double or single earpieces. Playback control with bar on typewriter or pedal under desk.

WORLD'S EASIEST TRANSCRIBING. Tens of thousands of secretaries operated their Stenorettes *flawlessly within five minutes after their first trial.* All agree that Stenorette's clear, restful "playback" permitted rapid, error-free transcription!

*A product of DuPont

INC

FIRST CLASS
PERMIT #1565
L.I.C., N.Y.

VIA AIR MAIL

BUSINESS REPLY MAIL
No postage stamp necessary if mailed in the United States

postage will be paid by—

DeJUR-Amsco Corporation
45-01 Northern Blvd.
Long Island City 1, N. Y.

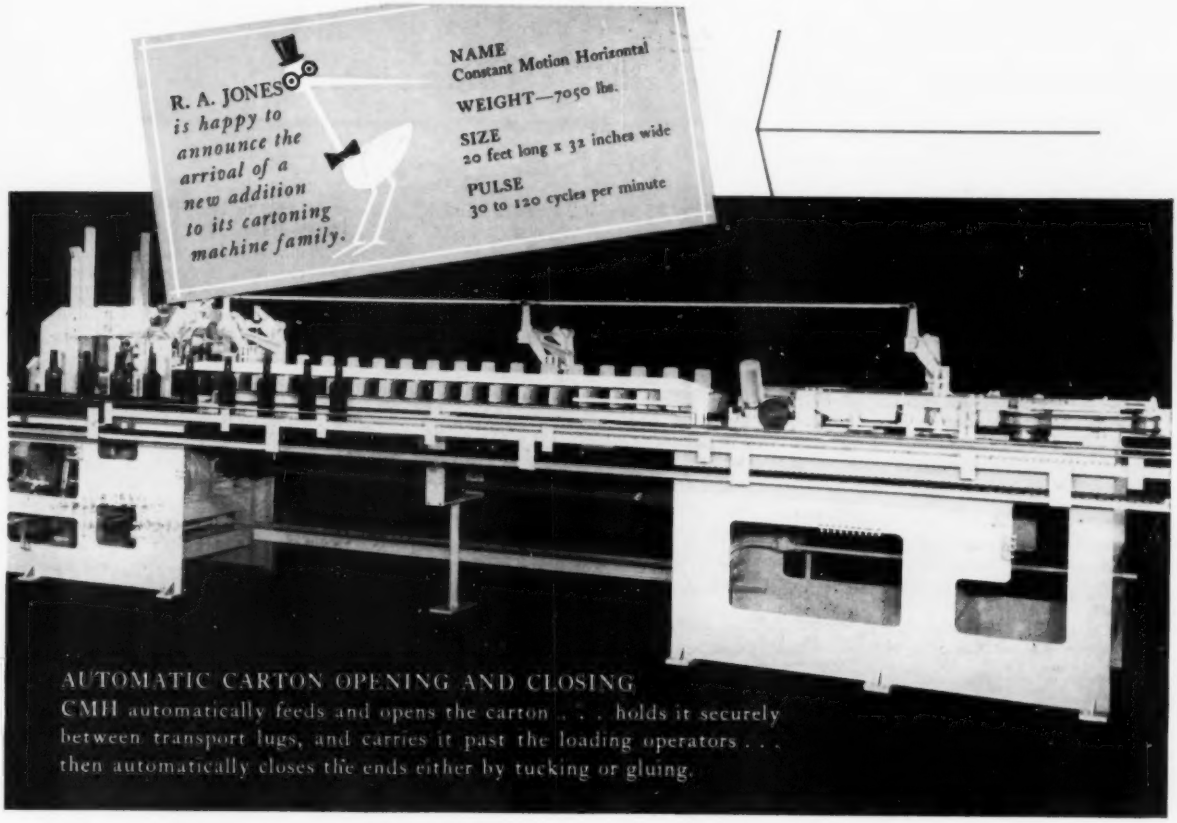
HAVE YOU SEEN THE NEW FULL LINE OF

DeJUR TRIUMPH Typewriters

Electric... Standard... Portable

See them at your dealer's now

Mail postage-free card for complete details on the newest, most outstanding line of typewriters *ever.*



AUTOMATIC CARTON OPENING AND CLOSING
CMH automatically feeds and opens the carton . . . holds it securely between transport lugs, and carries it past the loading operators . . . then automatically closes the ends either by tucking or gluing.

the new Jones CMH Semi-Automatic Horizontal cartoner

The new Jones CMH cartoner is designed for loading of products into cartons *horizontally*—a necessity particularly with heavy, bulky objects and products that cannot be loaded vertically. Note operation and construction features below. For additional information, write us outlining your requirements.

RUGGED CONSTRUCTION—CMH is built with the heavy, rugged construction features for which Jones Cartoners are noted.

POSITIVE CARTON FEEDING—The same positive, reliable carton feeding and opening principle, so successful on the Jones fully automatic machines, has been built into the new CMH.

SPEED—CMH accommodates either a tuck or a glued-end carton at speeds up to 120 cartons per minute. Can also be adapted for thermo-sealing a cold wax carton for the frozen food industry.

CHANGEOVER—Quick adjustability within the wide range of the CMH allows rapid changeover from one size carton to another.

LOADING—Operator's sole function is to slide the product into the end of the carton . . . all other operations completely automatic. Loading area can be designed to accommodate one or several operators.

R. A. JONES & COMPANY, INC.
Cartoning Machines - Case Packers

P. O. BOX 485, CINCINNATI 1, OHIO
BRANCH OFFICES
New York • Chicago • St. Louis • Los Angeles
San Francisco • Seattle • Mexico D.F.

For Your Information

The Packaging Machinery Mfrs. Institute reports that **Albert R. Stevens** of Elgin Mfg. Co. has been named chairman of the show committee for the **Packaging Machinery Mfrs. Institute Show of 1959**, to be held Nov. 17-20 at the New York Coliseum. Other committee members are: **W. B. Bronander, Jr.**, Scandia Packaging Machinery Co.; **K. B. Hollidge**, Arthur Colton Co.; **W. R. Huguenin**, Stokes & Smith Co.; **Harold Mosedale**, Package Machinery Co., and **K. M. Peterson**, Pneumatic Scale Corp., Ltd.

Andrew L. Johnson has been named pres. and research director of the **Glass Container Industry Research Corp.** Founded early last year, GIRC is comprised of 17 glass-container manufacturing companies. Its objective is to carry out a cooperative research program for the purpose of developing stronger and lighter-weight glass containers. (See "Glass Goes Lighter Still," MODERN PACKAGING, Dec., 1958, p. 75.) Dr. Johnson has taught and supervised research at Iowa State College and at Massachusetts Institute of Technology. For the past 10 years he has been director of research at the W. Keith McAfee Laboratory of Universal-Rundle Corp. He has also served as a consultant to the Atomic Energy Commission and the National Bureau of Standards.

Johnson

Harold W. Lee, director of lithography for J. L. Clark Mfg. Co., has been elected pres. of the **National Metal Decorators Assn.**

A proposed tentative test method for determining the dynamic properties of package-cushioning materials has been approved by Committee D-10 on shipping containers of the **American Society for Testing Materials**. A series of tests is planned to determine the reproducibility of a tentative method for determining the compatibility of packaging materials with the packaged item. The aim is to determine whether and to what extent different cushioning materials affect packaged items.

L. Rief Osburn, pres. of American Box Corp., has been elected a director of the **Fibre Box Assn.**

The **Packaging Assn. of Canada** has named **C. C. Callowhill** of American Can Co. of Canada as "packaging man of the year." An award, in the form of a plaque, was made to Mr. Callowhill at a banquet during the association's recent annual packaging exposition. PAC reports that the 1959 **Canadian National Packaging Exposition** will be held Nov. 3-5 at the Automotive Building, Exposition Grounds, Toronto. **S. C. Gillespie** of Canadian Chemical Co. will be general chairman.

Change in name of the **Lithographers National Assn.** to **Lithographers & Printers National Assn.** has been officially certified by the Secretary of State of New York State. LPNA reports that judging of entries in its 9th annual **Lithographic Awards Competition & Exhibit** will be conducted Jan. 19. Deadline for receipt of entries is Jan. 13. A total of 294 winners will be selected. Entries will be judged on the basis of quality of reproduction; excellence of design, art and typography, and effectiveness of the piece.

Large, "family-size" retail packages for foods are gaining steadily in popularity among shoppers, according to the 24th annual *Nielsen Report to Retail Food Stores*. Just published by the **A. C. Nielsen Co.**, Chicago, the report is in the form of a 34-page booklet and is liberally illustrated with charts. According to the Nielsen figures, retail food-store sales in 1957 were 7.7% greater than in 1956 and 57% greater than in 1950. Another chart in the report indicates that 62% of total food-store business for the year ending April 1, 1958, was done by only 9% of the stores (chains and large independent supermarkets). The small and medium independent-stores' share of the market has dwindled steadily since 1954.

Clare E. Bacon of Owens-Corning Fiberglas Corp. has been named chairman of the executive committee, **Reinforced Plastics Div. of The Society of the Plastics Industry, Inc.** The div.'s **14th Reinforced Plastics Conference** will be held Feb. 3-5 at the Edgewater Beach Hotel, Chicago.

Recommendations for informative labeling were discussed at the recent annual Midwest meeting of the Committee on Hardware Packaging of the **Packaging Institute**. Host to the Indianapolis meeting was the **National Retail Hardware Assn.** A subcommittee on informative labeling discussed standards and possible design formats for hardware retailing. Findings were presented to the regular committee meeting, at which were studied developments in quick-service packaging and decimal packaging as they affect industry standards.

Available from the **National Paperboard Assn.** is "Statistics-1957," the 24th edition of paperboard-industry statistics. The 40-page, 8½-by-11-in. booklet presents industry data in graph and table form. Included are such data as paperboard production and capacity for the years 1925 to 1957 (containerboard and boxboard); kraft, semi-chemical and all other paperboard production, 1925-1957; liner and corrugating material weekly tonnage production, 1954-1957, and price and consumption information. The edition is available to nonmembers, at $3, from NPA.

The **Food Packaging Council** held its second annual **National Food Packaging Symposium** Dec. 2 at the Palmer House, Chicago. Theme of the all-day meeting, attended by 125 registrants, was: "Merchandising the Package—A Road to Profits." Food packaging was discussed from the points of view of the packager, the wholesaler, the retailer, the consumer and the designer.

At its recent 26th annual meeting, the **National Paperboard Assn.** elected 35 members to its board of directors. They are: **W. J. Alford, Jr.**, Continental Paper Co.; **B. P. Altick**, Fibreboard Paper Products Corp.; **J. N. Andrews**, The Ohio Boxboard Co.; **A. Rodney Boren**, The Mead Corp.; **F. E. Brown**, Manchester Board & Paper Co.; **George M. Burrus**, United Board & Carton Corp.; **Alexander Calder, Jr.**, Union Bag-Camp Paper Corp.; **W. D. P. Carey**, Central Fibre Products Co.; **J. B. Cowie**, Scott Paper Co., H&W Div.; **Anthony Desiderio**, Whippany Paper Board Co.; **R. C. Doane**, International Paper Co.; **George E. Dyke**, Continental Can Co.; **W. M. Finley**, Tennessee Paper Mills; **E. J. Gardner, Jr.**, Diamond Gardner Corp.; **W. S. Goodspeed**, American Box Board Co.; **Wiley I. Jennings**, West Virginia Pulp & Paper

Events

Jan. 6-12—**American Rack Merchandisers Institute**, 8th annual convention, Sheraton Hotel, Chicago.

Jan. 25-29—**Plant Maintenance & Engineering Show & Conference**, Public Auditorium, Cleveland.

Feb. 2-6—**American Society for Testing Materials**, committee week, Penn-Sheraton Hotel, Pittsburgh.

Feb. 3-5—**The Society of the Plastics Industry**, 14th Reinforced Plastics Div. conference, The Edgewater Beach Hotel, Chicago.

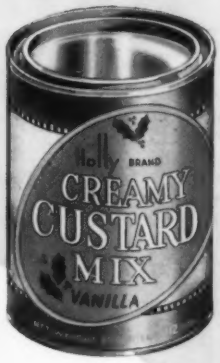
Feb. 10—**Society of Packaging & Handling Engineers** and the **American Materials Handling Society**, joint materials handling and packaging seminar, Congress Hotel, Chicago.

Feb. 20-23—**Canning Machinery & Supplies Assn.**, annual show, Conrad Hilton Hotel, Chicago.

Feb. 23-26—**Technical Assn. of the Pulp & Paper Industry**, 44th annual meeting, Hotel Commodore, New York.

CLEVELAND CONTAINERS—

planned packages for foods



GELATIN
CHEESE
COCOA
BISCUITS
BAKING POWDER
FLOUR
SALT
SPICES
CROUTONS
ETC.

CLEVELAND CONTAINERS are favored by many food manufacturers . . . such as the well known Los Angeles firm of Farmer Brothers . . . because, spirally wound or convolute, they are planned for the specific needs of each product whether packaged for home, institution, or commercial use.

- **THESE FOOD PACKAGES WERE DESIGNED TO PROTECT THE FLAVOR, TEXTURE AND QUALITY OF THE CONTENTS.**

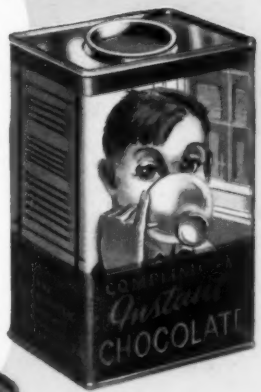
  Choice of liners in parchment, glassine, aluminum foil, polyethylene, etc. . . . provides moisture and grease resistance as required.

- **THEY SHOW VARIOUS TOPS, DISPENSING TYPES, EASILY OPENED FOR USE . . . AND READILY CLOSED.**

  Closures of metal or plastic in various designs and sizes provide the functional features called for.

- **THEIR LABELS OR WRAPPERS ARE ATTRACTIVE . . . PERSUASIVE . . . WIN PROMPT CUSTOMER ACCEPTANCE.**

  Can be made with plain or decorative wraps, or labeled as desired. May be had in many colorful combinations.



Why not let our Engineering Department help you with your packaging problems.

Why pay more? For quality products . . . call CLEVELAND!

Our newest illustrated packaging brochure is yours for the asking.

PLANTS & SALES OFFICES: CLEVELAND, DETROIT, CHICAGO, MEMPHIS, LOS ANGELES, PLYMOUTH, WIS., JAMESBURG, N. J., FAIR LAWN, N. J.

THE **CLEVELAND CONTAINER** CO.

6201 BARBERTON AVE. • CLEVELAND 2, OHIO

ALL-FIBRE CANS • COMBINATION METAL AND PAPER CANS • SPIRALLY WOUND TUBES AND CORES FOR ALL PURPOSES.

CLEVELAND CONTAINER CANADA, LTD.

Plants and Sales Offices: TORONTO AND PRESCOTT, ONT. Sales Office: MONTREAL

SALES OFFICES: NEW YORK CITY, WASHINGTON, D. C., ROCHESTER, N. Y., WEST HARTFORD, CONN. • ABRASIVE DIVISION AT CLEVELAND

CUT COST WITH SEALTITE

- Delivers a well settled, nicely squared bag at top, bottom and sides
- Pre-scored, double fold, uniformly glued seal keeps product in and dirt out
- Uses any standard make of gusseted bag — no royalties
- Seal readily opened, yet tamper-proof
- Seals 30 to 50 bags per minute
- Users report costs reduced up to $500.00 per month per machine

Write for complete information

CONSOLIDATED PACKAGING MACHINERY CORP.

1400 West Ave., Buffalo 13, N. Y.

For Your Information

Co.; **J. R. Kennedy,** Federal Paper Board Co., pres. of the association; **Thomas Kieffer,** The Kieffer Paper Mills; **Hugh C. Laughlin,** Owens-Illinois Glass Co.; **Roger L. Main,** St. Joe Paper Co.; **H. W. Morgan,** Weyerhaeuser Timber Co.; **C. H. Morian, Jr.,** East Texas Pulp & Paper Co.; **J. C. Mulholland,** Crossett Paper Mills; **Sture G. Olsson,** The Chesapeake Corp. of Virginia; **W. I. Osborne, Jr.,** Cornell Paperboard Products Co.; **Arthur E. Rozin,** Loroco Industries; **P. A. Schilling,** Waldorf Paper Products Co.; **L. H. Schoenhofen,** Container Corp. of America; **Henry D. Schmidt,** Schmidt & Ault Paper Co.; **M. W. Swaim,** Alton Box Board Co.; **G. J. Ticoulat,** Crown Zellerbach Corp.; **H. L. Wollenberg,** Longview Fibre Co., and **Charles L. Wood,** River Raisin Paper Co.

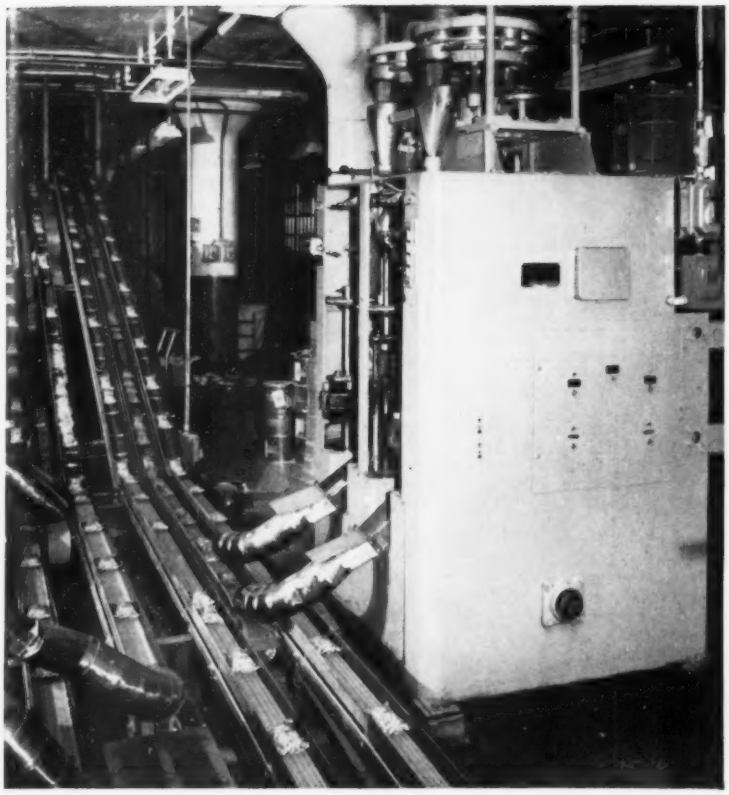
Past presidents **T. N. Bland** and **Sidney Frohman** also are members.

Western Michigan University, Kalamazoo, reports that 24 seniors will receive degrees in paper technology this year—the largest such graduating group in the university's history.

The eighth annual **Package Design Seminar** at New York University begins Feb. 4 and continues for 14 consecutive Wednesday evenings. The seminar is being headed up again this year by **Robert I. Goldberg,** FPDC and director of Associated Industrial Designers, New York package design firm, who serves on the faculties of the business school at N.Y.U. and Pratt Institute. Lecturers include **Frank Gianninoto and Jim Nash,** former presidents of Package Designers Council; **Pearl Hagens,** senior editor of MODERN PACKAGING, who will lead off the seminar with a chronological presentation of trend changes in consumer packages; **Dr. Myron Helfgott** of Package Research Institute and **Raymond Berland** of Alfred Politz Research, Inc., who will explain trends in research techniques; **Walter Stern** of Raymond Loewy Associates; **Willard F. Deveneau,** packaging consultant; **Douglas E. Tuttle** of Interchemical Corp.; **Emil Klimak,** editor of *Glass Packer,* and representatives from the Glass Container Mfrs. Institute, The Flexographic Technical Assn., The Folding Paper Box Assn. and the Permanent Display Producers Assn.

More than 350 packaging executives have attended these seminars, planned as a comprehensive series for sales managers, marketing executives, purchasing agents, packaging suppliers and designers. Registration must be made at the Div. of General Education, New York University, Washington Square, New York.

A registration of more than 10,000 is expected for the seventh annual **Advertising Essentials Show,** to be held Mar. 30-Apr. 1 in New York's Biltmore Hotel. Sponsored by the **Advertising Trades Institute,** the show's more than 100 exhabits will include new and improved examples of packaging developments.



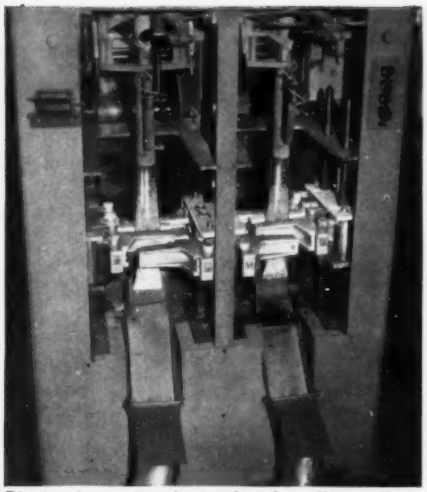
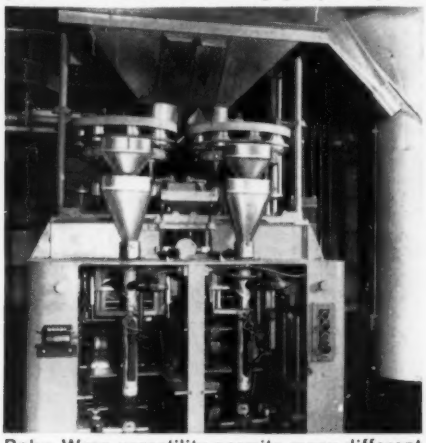


Photo shows hand-over-hand sealing action. Lower jaws, now disengaged, start to go up and pass on the outside of still-engaged pair of jaws.



Robo-Wrap versatility permits many different feeding arrangements. At General Mills, there is a volumetric feeder leading from storage hopper supplied from floor above.

Why General Mills chose Robo-Wrap for Pick-A-Pack

This new Robo-Wrap at General Mills' Chicago plant will soon be joined by 2 more machines—because it has been proved that Robo-Wrap increases the efficiency and economy of their packaging operation.

The Robo-Wrap forms, fills and seals pillow packages. Under production line conditions at General Mills, the Robo-Wrap cruises at 100 bags a minute and can run at 120 . . . it provides a better seal and fewer rejects even at these high speeds because its unique hand-over-hand action holds jaws in sealing position for a longer time . . . it minimized work stoppages due to torn paper roll stock because the combination mechanical and hydraulic jaws exert a strong, jerk-free pull . . . it is easily adaptable to handle a variety of other products.

Robo-Wrap packages in cellophane, paper, poly, plastic or laminates. See how it can answer your needs for speed, dependability, easy maintenance and adaptability.

General Mills Pick-A-Pack Package offers five tasty breakfast foods—Wheaties, Cheerios, Kix, Trix, and Sugar Jets—in one attractive carton.

Write for illustrated Robo-Wrap Folder
that demonstrates features and advantages important to you.

LYNCH
CORPORATION
Anderson, Indiana

U. S. Patents Digest

Method and Means for Packaging a Continuous Strand, Warren Wendell Drummond (to Owens-Corning Fiberglas Corp., New York, a corporation of Delaware). U.S. 2,854,731, Oct. 7. Apparatus for packaging a continuous flexible strand, comprising in combination means for projecting said strand longitudinally along a generally linear path.

Apparatus for Manufacturing Heat-Sealed Flat Bags and for Pulling Such Bags over Mandrels of Square Section, Ulrich Bauder and Maximilian Hornsteiner (to Fr. Hesser Maschinenfabrik A. G., Stuttgart-Bad Cannstatt, Germany). U.S. 2,854,899, Oct. 7. In an apparatus for forming heat-sealed bags (including means for forming a continuous flat tube having longitudinally spaced, transversely extending bottom seams) the provision of a mandrel and longitudinally reciprocable feeding tongs at either side of said tube for intermittently moving said tube toward said mandrel.

Apparatus for and Method of Combining Enwrapments, Clarence W. Vogt, Norwalk, Conn. U.S. 2,854,898, Oct. 7. The method of assembling enwrapments which comprises continuously advancing elongated strip material between a pair of spaced stacks of individual enwrapments, intermittently deflecting said elongated strip material into contact with an individual enwrapment from each of said stacks.

Apparatus for Transferring and Trimming Plastic Articles, George V. Mumford (to Owens-Illinois Glass Co., Toledo, a corporation of Ohio). U.S. 2,855,044, Oct. 7. In an apparatus for finishing plastic articles wherein the article as formed in a finishing mold has a neck, a body and a waste nubbin on the bottom of said body, said article being suspended by said neck from a neck mold.

Hosiery Package, John C. Berry and William J. Berry, Durham, N. C. U.S. 2,855,097, Oct. 7. A hosiery package comprising an insert having first, second and third complementary panel members folded against one another in a "Z" fold, said complementary panel members being joined respectively along one side edge by a fold line.

Counter with Rotating Device, Leonard T. Cookson and W. Ralph Smith (to The Upjohn Co., Kalamazoo, a corporation of Michigan). U.S. 2,855,128, Oct. 7. A device for circulating a plurality of small articles to a discharge station.

Self-Closing Bag, Calvin Maurice Clay (to International Minerals & Chemical Corp., a corporation of New York). U.S. 2,855,136, Oct. 7. A valve-type closure in a flat, closed-end gusseted paper bag comprising an inwardly diagonally folded upper-corner portion providing a trough-like filling passageway, said inwardly folded portion being integral with the bag.

Packaging Process, Fred A. Groth (to Skin-Pack, Inc., Chicago, a corporation of Illinois). U.S. 2,855,735, Oct. 14. A process for the packaging of articles comprising the steps of applying a non-continuous layer of adhesive to a surface of a porous panel, placing the articles to be packaged on said panel surface having adhesive thereon, at least a portion of said surface beneath said articles being air-permeable.

Method and Apparatus for Releasing Adjacent Layers of Material for Opening Bags, Joseph DiNunzio and Alfred Gans (to Roto Bag Machine Corp., New York). U.S. 2,855,831, Oct. 14. A bag-making machine of the type wherein a flat, continuous envelope of heat-sealable material is moved continuously through said machine and including a heat sealer wherein the envelope layers are sealed together by regularly spaced heat seals extending across said envelope and a cutter wherein said envelope is cut into individual containers.

Rotatable Heat Sealer, Edward Ewell Wagner, Petersburg, Va. U.S. 2,855,977, Oct. 14. A heat sealer for packages comprising: a rotary shaft mounted for rotation in a frame; a pair of spaced, heated rotatable elements affixed to said shaft and rotatable therewith, said elements adapted to heat seal a package positioned therebetween and one of said elements being movable along said shaft to vary distance between elements.

Fruit-Orienting Machine, Henry A. Skog (to Food Machinery & Chemical Corp., San Jose, Calif., a corporation of Delaware). U.S. 2,856,057, Oct. 14. In a device for orienting peaches or like indented and sutured fruit, a rotatable orienting member adapted to engage and rotate a fruit body and enter the stem indent to maximum extent only when in alignment with the suture plane of the fruit, means arranged to maintain the fruit body supported solely upon said member and to resist displacement of the fruit body upon rotation of said member.

Positioning Apparatus, George W. Todd and Daniel A. McIsaac (to Jones & Laughlin Steel Corp., Pittsburgh, a corporation of Pennsylvania). U.S. 2,856,058, Oct. 14. Positioning apparatus comprising longitudinally extending ways, an abutment at one end of the ways, a ram slidably mounted on said ways elongated toward said abutment, means to reciprocate the ram along the ways, and a roll positioned lengthwise of the ram and journaled therein for free rotation.

Self-Closing Plural-Cavity Case, James T. King, Glendale, Calif. U.S. 2,856,066, Oct. 14. In a self-closing plural-cavity case for cigarettes or other articles of similar elongated configuration, a plurality of elongated members of "I"-shape in cross-section and comprising a central web portion and, oppositely, laterally projecting flange portions at each edge of said web portion, said members being arranged side-by-side.

Dispensing Mechanism for Packaged Window Material, Fred L. Whipple (to the Secretary of the Air Force). U.S. 2,856,185, Oct. 14. Apparatus for dispensing articles interconnected by a continuous tape, comprising a frame having opposed parallel end plates on opposite ends thereof and intermediate cross-plate members spaced in parallel relation therebetween, a drive shaft transversely mounted between said end plates for rotation.

Plastic Container, Fred C. Gossett and Doland A. Hamilton (to Don Baxter, Inc., Glendale, Calif., a corporation of Nevada). U.S. 2,856,929, Oct. 21. A lay-flat plastic container, the body of which is formed of polyvinyl chloride tubing having 15 to 50% plasticizer, the layflat sides of said tubing being sealed together at opposite ends to form a container, the container being provided with a polyvinyl chloride entry pad which furnishes a resilient thickened section for self-sealing and holding a needle piercing the same, said pad being attached to the tubing and containing from 60 to 90% plasticizer.

Ampule-Orienting Device, Allen E. Westville (to Smith, Kline & French Laboratories, Philadelphia, a corporation of Pennsylvania). U.S. 2,857,039, Oct. 21. An ampule-orienting device comprising a conveyor having openings for the reception of ampules, said openings being substantially perpendicular to the direction of movement of the conveyor and extending to one edge of the conveyor, a supporting member below said conveyor for the support of said ampules in said openings, means adapted to engage the bases of the ampules which extend away from said edge of the conveyor and advance them outwardly until the neck portions extend beyond said edge of the conveyor.

Display Carton, Daniel J. Foote and William G. Kailas (to Master Lock Co., Milwaukee, a corporation of Wisconsin). U.S. 2,857,045, Oct. 21. A display package comprising a carton which includes foldably connected face, end and bottom walls wherein the end walls are disposed at right angles to the face walls and the bottom wall is disposed at right angles to the face and end walls to form a container of rectangular form in cross-section with a top section foldably connected to one of the face walls and having a slot therein.

Dispensing Container for Sheet-Wrapping Material, Walter A. Klein (to The Dow Chemical Co., Midland, Mich., a corporation of Delaware). U.S. 2,857,046, Oct. 21. In combination, a wound supply package of sheet-wrapping material, a headless core for supporting said package, said core being notched so as to have a ratcheted end, a container for receiving said supply package having an outlet through which sheet material from the supply package is dispensed.

Means for Facilitating Lifting Layered Sheet Material, Dorothy R. Edelson, Elkins Park, Pa. U.S. 2,857,047, Oct. 21. In combination with a roll of

HHH
ALINA-X-30

Flexographic Endprinters, one to four colors, from 20" to 59" printing widths, built to fit any size bag machine.

Write for our latest technical bulletin, No. 120, describing our new "AIRAY" Hot Air drying system designed for End printers.

H. H. HEINRICH CO. 111 Eighth Avenue, New York 11, N. Y.

SOLVE YOUR PACKING PROBLEMS at Low Cost with

PARTITIONS
• Sleeves • Necks •
FOR PROTECTIVE PACKAGING

WRITE, PHONE, WIRE for QUOTATIONS on YOUR REQUIREMENTS

Peter Partition Corp. operates one of America's *largest* plants devoted *exclusively* to the production of cardboard partitions.

PETER PARTITION CORP.

Manufacturers of Cardboard Partitions

124 BOERUM PLACE BROOKLYN 1, N.Y.

Telephone: TRiangle 5-4033

THE MOST COMPLETE LINE OF UNSCRAMBLERS!

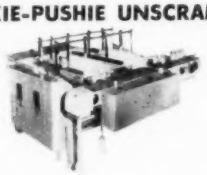
Styl-O-Matic
ROTARY UNSCRAMBLER

Cartons of round bottles, jars, cans or containers are inverted onto the tilt-top table. Contents are pushed onto revolving disk and *automatically* dispatched in single file to the conveyor. Also available with pallet feed for anti-biotic containers.

Styl-O-Matic
STRAIGHTLINE UNSCRAMBLER

Cartons or cases of bottles, jars, cans or containers dumped onto table are instantly unscrambled and regimented into a single file to keep a continuous flow of units on your production line.

Styl-O-Matic **High Speed**
WALKIE-PUSHIE UNSCRAMBLER



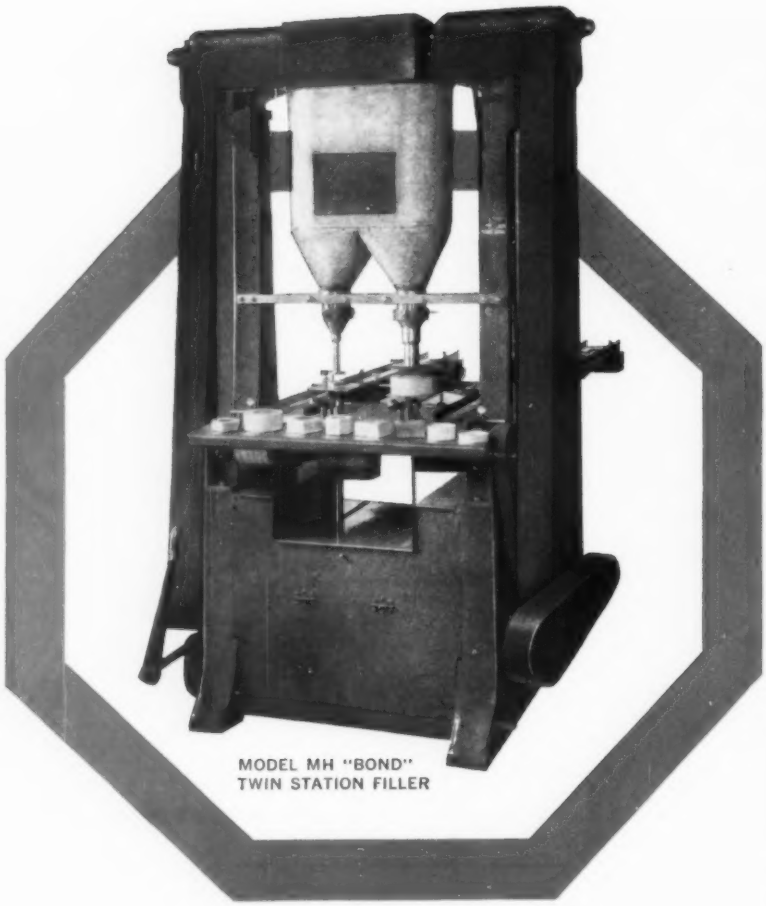
Accommodates almost any size or shape container at speeds up to 400-450 per minute. Bottles, jars, cans or containers are unscrambled *without agitation*, and no scuffing or contact when discharging. High speed, very gentle handling is assured. Available also in twin units.

Styl-O-Matic
SURGE TABLE

An accumulating table that is placed at a point in the conveyor production line to receive and hold round bottles, jars, cans or containers when succeeding equipment is momentarily shutdown.

Send for free catalog of The Complete Styl-O-Matic Line plus information on any of the products listed in this advertisement.

ISLAND EQUIPMENT CORP. Dept. MP1 • P.O. Box 380276 • Miami 38, Florida



MODEL MH "BOND"
TWIN STATION FILLER

Products and Containers Unlimited!

Drugs, chemicals, insecticides, cosmetics, spices, food products . . . fine powders, granules, grains . . . sticky powders or free-flowing materials . . . may be volume filled, gross weighed or packed — on the one machine — into almost any type or size of container, in weights from a few grams up to 10 lbs. or more. Running speeds up to 50 per minute with one operator. Other models available, semi-automatic and fully automatic. Write **US** for complete information.

PACKAGING MACHINERY MANUFACTURERS INSTITUTE
PMMI
MEMBER

U. S. AUTOMATIC BOX MACHINERY CO., INC.

66 ARBORETUM ROAD, ROSLINDALE, BOSTON 31, MASS.

Branch Offices: New York • Chicago • Springfield, Missouri
James C. Hale Co., Los Angeles, San Francisco • R. S. Gold, Toronto

U. S. Patents Digest

flexible, tissue-thin plastic sheet material inherently of such nature that superposed layers thereof tend to cling tenaciously together, means incorporated in said roll of plastic sheet material for facilitating separation of the outer end thereof from its underlying layer preliminary to unrolling a portion of the material from the roll.

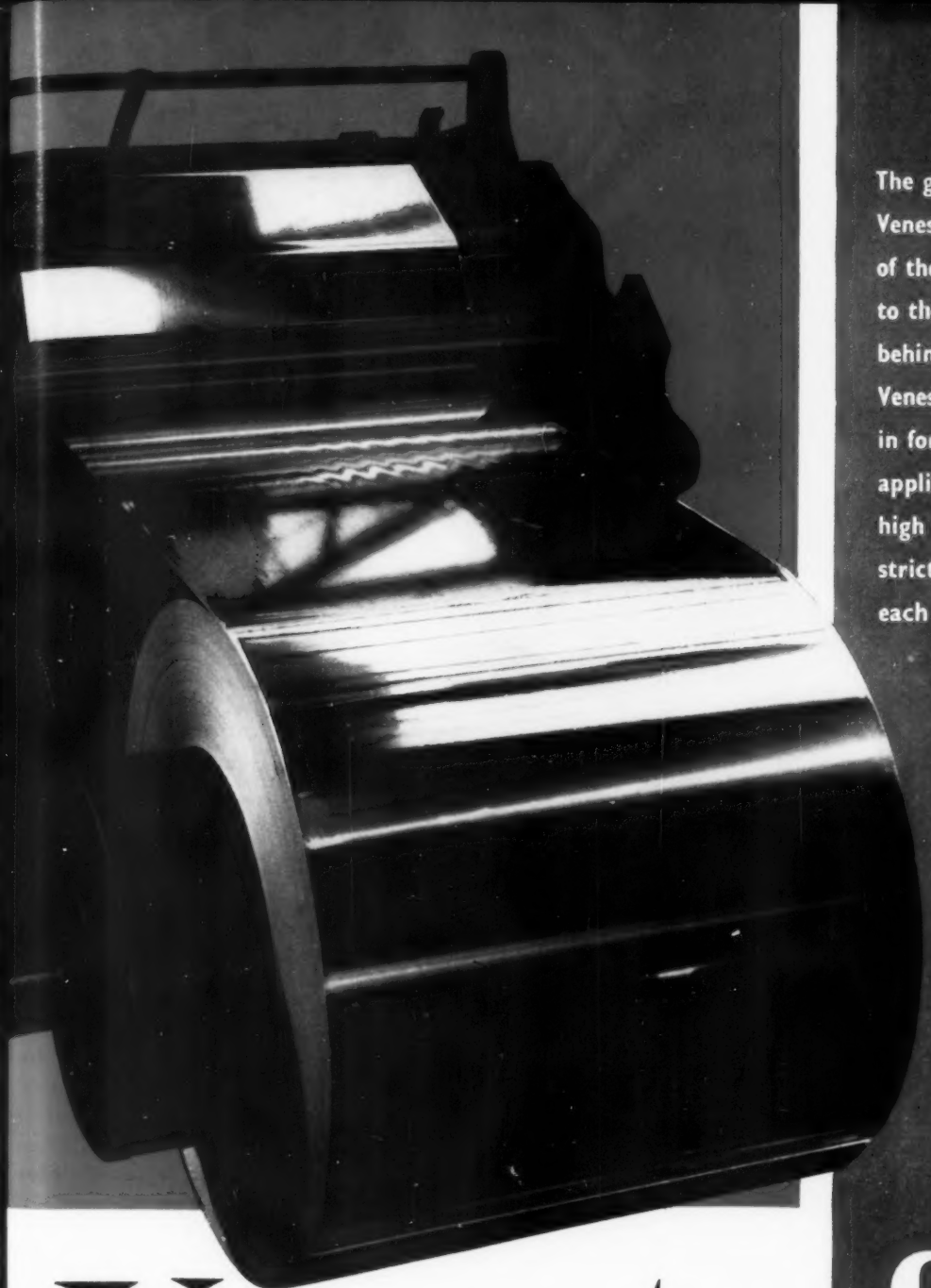
Container Closure, Edward O. Kraepelin, Los Angeles. U.S. 2,857,068, Oct. 21. A container comprising a receptacle having an opening therein, a unitary closure for seating over said opening, said closure comprising a circular disk formed from an elongated blank having semi-circular ends, said blank being gathered to form a medial transverse pleat, said pleat being severed transversely by a pair of spaced parallel slits, the portion between the slits being pressed downwardly to form a loop and the remaining portions of the pleat outwardly of the slits being pressed upwardly to form an integral handle for the container.

Can-Lid Seal Ring, James C. De Shazor, Jr., (to Columbia Basin Plastics Co., Portland, Ore). U.S. 2,857,075, Oct. 21. The combination of a sheet-metal can having a cylindrical side wall with sheet-metal end members double seamed to the top and bottom ends of said body, the top end of said can having a central disk portion of slightly smaller diameter than the cylindrical body removed therefrom and the adjacent portion of said end being rolled into contact with the adjacent body wall.

Container, Ralph D. Tolbert, Jr., Joseph E. Bacino and Hjalmar T. Lundquist (to National Vulcanized Fibre Co., Wilmington, a corporation of Delaware). U.S. 2,857,076, Oct. 21. A container including a side wall formed from sheet material with opposite ends thereof in overlapping relation, one overlapping end being notched at one of its corners a peripheral distance substantially equal to the length of the overlap to provide a bottom rim receiving area of single-sheet thickness and of predetermined height, and a bottom including a vertically extending peripheral rim.

Paperboard Carton, Alford A. Williams (to Stone Container Corp., Chicago, and to Old Dominion Box Co., Charlotte, N.C.). U.S. 2,857,088, Oct. 21. A container formed of a single blank of paperboard and comprising: a first section having a rear side wall, first bottom wall and front side wall integrally connected along fold lines in the order named; a second section having an inner end wall, an outer end wall, a second bottom wall equal in size to the first bottom wall and a third end wall integrally connected along fold lines in the order named—the two sections being integrally connected along a fold line between a common vertical edge of the front side wall and the third end wall and the opposite vertical edge of the third end wall being connected to an edge of the rear side wall.

Container for Heavy Articles, Clifford D. Fallert (to Crown Zellerbach Corp., San Francisco, a corporation of Nevada). U.S. 2,857,090, Oct. 21. A unitary container having a bottom with foldably connected upstanding side and end walls, and a bottom, a substantially



The growing demand for Venesta foil in the markets of the world is a tribute to the skill and experience behind its production. Venesta foil is supplied in forms suitable for all applications, and its high quality is maintained by strict process control at each stage of manufacture.

Venesta foil

Consistently Good

VENESTA

Agents for the United States of America & for Canada
PARSONS & WHITTEMORE INCORPORATED
250 Park Avenue, New York, 17, N.Y. phone Yukon 6-6000

For the addresses of our Agents in other countries write to
VENESTA LIMITED, *Foil Division,*
Vintry House, Queen Street Place, London, E.C.4, England

Package the Glamorous Way

Combination paperboard and telescope style Celanese acetate cover

WITH CELANESE ACETATE SHEETING

Celanese acetate cover eyeletted to board. Cover is provided with snaps for opening and closing.

When you want an inspired approach to low cost packaging—tailored to your specific needs without costly dies and molds . . . when you need to dress up your product for greatest appeal at the point-of-purchase . . . when you want fast packaging, easy shipping, long or short runs, and maximum display . . .

Ask your supplier about Celanese Transparent Sheeting, and the many ways it can be used to create glamorous and sales-effective packages.

Celanese Corporation of America, Plastics Division, Dept. 108-A, 744 Broad Street, Newark 2, N. J. Canadian Affiliate: Canadian Chemical Co., Limited, Montreal, Toronto, Vancouver. Export sales: Amcel Co., Inc., and Pan Amcel Co., Inc., 180 Madison Avenue, New York 16, N. Y.

Celanese®

Celanese
acetate sheeting

TRANSPARENT ACETATE CONTAINERS CREATED AND PRODUCED BY J. E. PLASTICS MFG. CORP. YONKERS, NEW YORK

U. S. Patents Digest

similar side wall, corner and end wall reinforcing extension foldably connected to each end of each side wall at substantially a right angle thereto and with the extensions from one side wall extending forward and in alignment with the extensions projecting from the other side wall.

Novel and Improved Packaging Process, Chester M. Gooding, Daniel McInick and Hans W. Vahlteich (to The Best Foods, Inc., New York, a corporation of New Jersey). U.S. 2,858,225, Oct. 28. A process of treating a package in which there is sealed and wrapped a product susceptible to microbiological growth with an air pocket existing between the wrapper and the product and in which the inner surface of the wrapper is impregnated with a fungistat of low volatility at ambient temperature, comprising subjecting the package to a temperature of about 300 to 600 deg. F. for a brief period of time not in excess of three minutes.

Corner Construction, Walter E. Rose (to Container Supply & Research Co., Dundee, Ill., a corporation of Illinois). U.S. 2,858,037, Oct. 28. A corner construction for a container having side panels comprising outer, inner and intermediate longitudinally extending strips of stiff resilient material, said outer strip being substantially arcuate in cross section, said inner strip having a substantially flat central portion and wing portions at each side thereof at an angle for fitting them within the said outer strip.

Hinge Structure for Molded Boxes, Roland N. Gibbs (to Gibbs Automatic Molding Corp., Henderson, Ky., a corporation of Kentucky). U.S. 2,858,039, Oct. 28. A molded-plastic box having in combination a box body including a rear-wall portion, a cover for said box body including a rear-wall portion and a pair of spaced hinge structures for pivotally mounting said cover upon said box body at the rear-wall portions thereof and including in each hinge structure a pintle support fixedly carried on the rear wall of said cover and projecting outwardly therefrom.

Produce Box, Thorne C. Kitchell (to Union Bag-Camp Paper Corp., New York, a corporation of Virginia). U.S. 2,858,058, Oct. 28. A shipping container of corrugated board comprising bottom, side and end walls, a cover hinged to a wall and adapted to be folded inwardly over the walls, and locking means for securing the cover to a wall not hinged to the cover, which latter wall has integral inner and outer panels in face-to-face relationship hinged together at the upper edge of the wall, said locking means comprising an inverted T-shaped cutout in the outer panel.

Tear-Off Closure for Containers of Paper, Paperboard or the Like Material and Method of Producing the Same, Karl Kuchler (to Jagenberg-Werke A.G., Dusseldorf, Germany). U.S. 2,858,060, Oct. 28. Tear-off closure arrangement for containers of paper, paperboard and similar carton-forming material, comprising a container wall of such material, a flap having a portion adhesively secured to the exterior of said wall and including a grasping portion free from said wall.

DOMEPAK - Low-Cost Way To Groom Your Product For Sales

Plastic Artisans' DOMEPAK gave Schnefel Bros. an economical, high-speed way to show-package their LaCross line in form-fitting plastic.

The clear plastic dome containing the product is locked by a label to the card back only. This label is applied automatically by a labeling machine, minimizing assembly costs.

This mass-packaging technique makes transparent packages feasible for a whole new range of products. Even items with very tight packaging budgets can now have the visible sales appeal given by Plastic Artisans' DOMEPAK.

Write For Free Reprints Of The LaCross-DOMEPAK Success Story

An article in Modern Packaging gave complete details on how the LaCross line is being packaged. For a free reprint, write to Plastic Artisans, today.

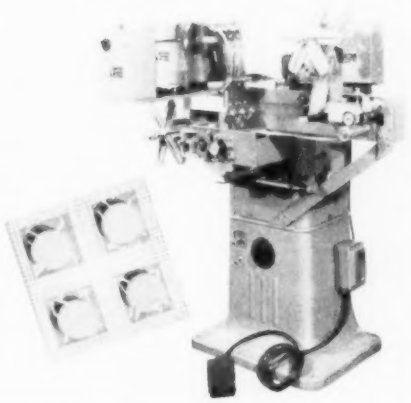
PA

PLASTIC ARTISANS, INC.
Dock Street & Martin Place, Port Chester, N. Y.
Custom-designed packages, package components, novelties, sampling devices, etc. in clear, opaque & colored plastics.
PA-106

wrap-ade

HIGH SPEED
UNIT PACKAGER

This Wrap-Ade Unit Packager speeds production and cuts costs in
PACKAGING TABLETS



Shown is only one of many Wrap-Ade Unit Packagers. Other models available for packaging:

- LIQUIDS
- POWDERS
- TABLETS
- SOFT GOODS
- FOOD PRODUCTS
- HARDWARE

or any reasonably flat small product

Send us a sample of your product today for our prompt quotation.

wrap-ade MACHINE CO., INC.
Celebrating a Quarter Century of Progress in Packaging
189 SARGEANT AVENUE · CLIFTON, NEW JERSEY
PHONE: PRESCOTT 3-6150

Send for the *WILSOLITE* technical man!

You are always looking for the newest improvement, especially in a new art like printing with flexible materials. Send for the Wilsolite man when you have a technical problem; keep in touch with him as the source of information on printing progress. Wilsolite Technical Bulletins on Engraving Rubber Plates, Liquid Plastic Plates, Bakelite Materials and related subjects offer valuable information. Write to Wilsolite for help on your technical problems.

Rely on *WILSOLITE* for the best quality in supplies and materials.
We feature

GOODYEAR
Natural and synthetic rubber for molding and engraving.

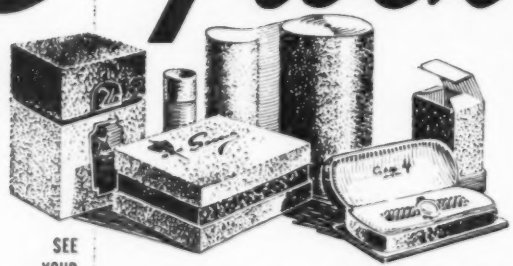
WILSOLITE
Matrix materials; fill-in powders, embossing sheets.

ASK YOUR COMMERCIAL PLATE MAKER! He is an expert in working with Wilsolite flexible materials.

WILSOLITE CORPORATION
1827 Niagara Street, Buffalo 7, New York
CANADIAN AFFILIATES: Toronto, Ont. • Fort Erie, Ont. Vancouver, B. C.
WAREHOUSES: Buffalo • Hackensack • Pensacola Denver • Los Angeles • San Francisco • Seattle

The Packaging Industry's Magic Carpet!

CLAREMONT Flock

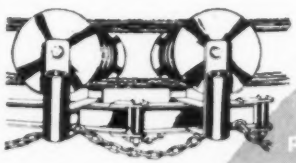


SEE YOUR PAPER MERCHANT FOR:
Flock-Affixed Papers ...IN ROLLS
Boxboard ...IN SHEETS
(18 brilliant colors)

—Claremont Flock . . . those tiny clipped-lengths of luxurious cotton and regal rayon. We market this irresistible outer raiment in bulk to paper processors, product manufacturers, packaging specialists and display builders who, for dramatic enrichment, apply it to paper, glass, metal, cork, plaster and similar materials.

Flock is a fascinating stimulant—and for pennies, an ounce adds a pound of allure. Check your suppliers—or, for complete information, feel free to contact us direct.

CLAREMONT FLOCK CORPORATION
The Country's Largest Manufacturer of FLOCK
CLAREMONT, NEW HAMPSHIRE



You can cut loading costs in half on packaged or bagged items. Let us show you how—fill in and mail the section below:

LEARN HOW TO SAVE MANPOWER IN LOADING BOX CARS AND TRUCKS

We pack_____
(material)

NAME.....

FIRM.....

ADDRESS.....

POWER-CURVE CONVEYOR CO.
2185 South Jason Street, Denver 23, Colorado

New and improved films highlight plastics show

For packagers, the accent was on new and improved films at the recent eighth annual National Plastics Exposition sponsored by The Society of the Plastics Industry. Chicago's huge Amphitheatre was crammed with the largest array of plastic products and equipment ever displayed at one time. While films captured greatest packager interest, there was much else of importance. These were highspots:

High-density polyethylene film. Many companies exhibited these films, whose low permeability, high tensile strength and excellent heat resistance are said to make them particularly suited for boil-in-the-bag food packages and for products requiring good chemical resistance in their packaging.

Medium-density polyethylene films. These new films are clearer, more brilliant and more "crackly" than their predecessors. Their increased stiffness and recent improvements in packaging machinery are said to bring polyethylene close to cellophane as far as efficiency on automatic equipment is concerned.

Heavy-duty polyethylene bags. These are effective new packages for agricultural chemicals, resins, fertilizers, etc., which, until now, have been packed almost exclusively in multiwall bags. They are reported to have many advantages for on-farm use. They may be stacked outside or in damp barns without harm because of their waterproof characteristics. They are also tear resistant and discourage rodent damage. These 10-mil polyethylene bags are said to have a bright future for industrial chemicals now packed in rigid containers.

Heavy-duty nylon bags. Still experimental, these may provide durable packaging for motor oils and highly permeable chemicals now packaged in cans.

Polyvinyl alcohol film. Just coming on the market in limited amounts, this water-soluble material has a potential for pre-measured portions of detergents, insecticides and poisons.

Transparent oriented polystyrene sheet stock. This material can be preprinted in a roll, then formed into clear, disposable containers for bakery products, frozen foods, confections, etc., reportedly at substantial dollar savings. It can be used as a lid with rigid aluminum foil bases for frozen foods.

Expandable polystyrene beads. Thin but rigid, often laced with metal flecks for beauty, these beads can be molded into both decorative shapes for cosmetic packages, as well as functional heavy-duty shipping containers.

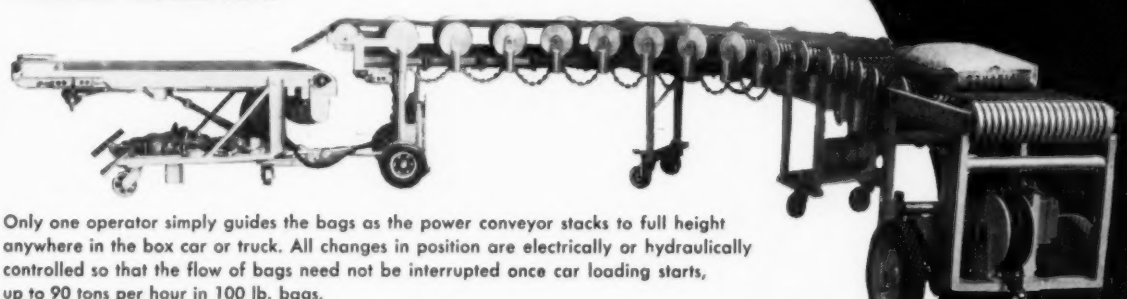
Blow-molded high-density polyethylene bottles. Lightweight, colorful, non-breakable, corrosion-resistant—you can look for a battle to shape up between these new molded polyethylene bottles and conventional glass bottles and metal cans.

Thermoformed plastic sheet of various kinds. These sheets, which may be pre-printed, also have the advantage of fast, low-cost tooling. They are especially good for small-volume runs or unusually large sizes of packages in any volume and may give injection molding a battle for survival.

Polypropylene. This highly heat-resistant, strong and tough material has probable applications for boilable food pouches and blow-molded or injection-molded containers. End

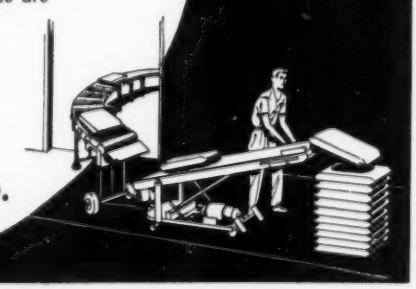
NEW! PUSH-BUTTON BAG STACKER MAKES ONE-MAN JOB OF BOX-CAR AND TRUCK LOADING

POWER-CURVE LOADER STACKS 30 BAGS A MINUTE CONTINUOUSLY



Only one operator simply guides the bags as the power conveyor stacks to full height anywhere in the box car or truck. All changes in position are electrically or hydraulically controlled so that the flow of bags need not be interrupted once car loading starts, up to 90 tons per hour in 100 lb. bags.

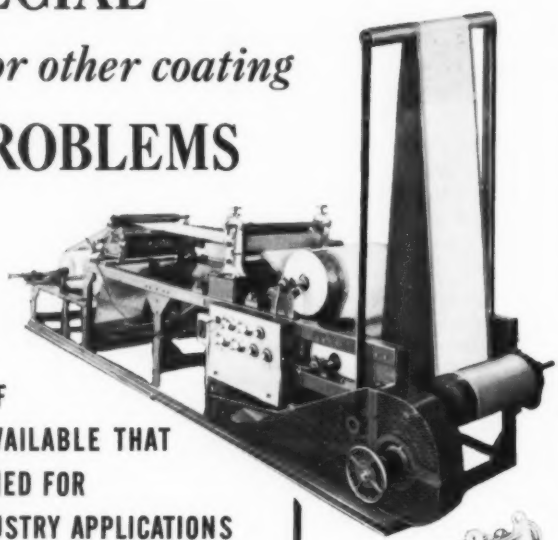
Power-Curve operator drives the conveyor across the loading dock and into the car end with push button power, around corners over any *U* or *S* path. Controls of flexible conveyor surface are independent, reversible for loading or unloading trucks and cars. Stacker hoist lifts belt from 18 in. to 72 in. above floor. Rough-top belt shoots bags or packages into place taking all the work and lifting out of loading operation. Stacker unit disconnects from flexible conveyor. Write for complete catalog, typical layouts in your industry, list of installations, etc.



POWER-CURVE CONVEYOR CO.

2185 SOUTH JASON STREET, DENVER 23, COLORADO

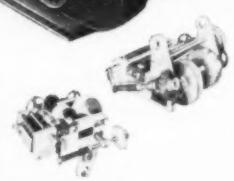
LET POTDEVIN SOLVE YOUR SPECIAL *gluing or other coating* PROBLEMS



HUNDREDS OF MACHINES AVAILABLE THAT WERE DESIGNED FOR SPECIAL INDUSTRY APPLICATIONS

If your problem is high speed coating of paint, varnish, resins, lacquer, glue, latex, etc.—POTDEVIN'S sixty years of specialization in coating equipment can quickly help you solve it... guaranteeing initial low cost and top efficiency.

Let us know your problem. We'll be happy to submit our recommendation.



TOPSIDE OR UNDERSIDE COATER

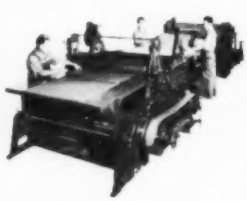
Applies solid or strip coating on traveling webs (vertical or horizontal).

AUTOMATIC FEED CONVEYOR GLUER

For high speed coating production. Equipped with drying oven.

CYLINDRICAL TUBE LABELER

Automatically labels cylindrical paper tubes.



WEB AND SHEET LAMINATOR

Combines sheets or webs of materials such as cork, fibreboard, etc.

ESTABLISHED IN 1893 — POTDEVIN

POTDEVIN MACHINE CO.

244 NORTH STREET TETERBORO, N. J.

Designers and manufacturers of equipment for Bag Making, Printing, Coating, Laminating, Gluing and Labeling.

Fish in film

[*Continued from page 79*]

the brand identity so important to repeat sales. Both problems, the company felt, could be solved by packaging that showed off the fish and satisfied the requirements of in-store display, brand identification and handling convenience.

In cooperation with its packaging consultant, LASCCO threshed out the problems involved in converting a bulk operation into retail packaging. Product shelf life had to be determined with regard to moisture content, storage capability of the particular fish and general appearance of the product as aging takes place. In addition to the packaging material to be used, package size and design had to be considered. Because individual fish of the same family vary in weight, an important design requirement was to provide a convenient method for store clerks to mark price and weight data on each package.

Most important, each of these factors had to be considered in the light of an acceptable cost framework to justify the company's decision to package its products.

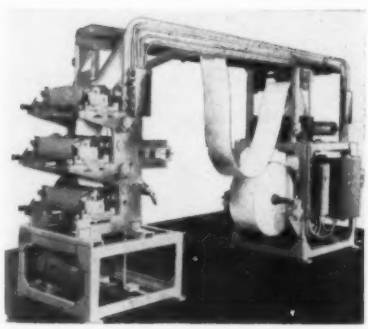
In the end, LASCCO chose transparent films as its packaging medium. Polyester film, polyethylene and combinations of polyethylene and cellophane, printed with attractive designs that complement the colors of the fish, provided the materials for most of the bags in which the company's products now reach the customer.

The company's whole smoked fish are packaged in long, narrow bags with transparent areas in the center that conform roughly to the shape of the fish for maximum product visibility. The solid-color-printed borders of each bag contain the company's logo and the name of the fish. A white printed square for retail marking of price and weight is featured prominently at one end of the bag. On some of the film packages, a small square of lacquer is bonded to the bag surface to make marking easier.

Since LASCCO also produces pickled fish—such as salt mackerel fillet and imported Norwegian herring—it faced the problem of placing an exact amount of brine into the bags for these products while maintaining high production speeds. The problem was solved by adapting

for
IMPRINTING
CODING
THE MULTIPRESS
MARKINGS OF PRINTING-PRESS-QUALITY ON
FOLDED CARTONS • LABELS • MATERIALS •
PAPER PRODUCTS • BAGS • ADVERTISING
LITERATURE • FLAT CONTAINERS
IMPRINTING
LOT NUMBERS • DATES • FLAVORS • SIZES •
PRICES • CONTENTS • COLORS • STYLES • CATALOG
NUMBERS • BLOCKOUTS • DEALER IMPRINTING
CONSULT VERNER ON IMPRINTING PROBLEMS
B. VERNER & CO., INC.
52 DUANE STREET, NEW YORK 7, N.Y. BA 7-1466-7

Multicolor Web Printing Presses
Bag-Making Machines



**JUNIOR 12"
STACK PRESS**

Prints up to three colors on webs up to 12" wide at 400 ft/min. Highly compact (2' wide by 15' long). Ideal for commercial production or test runs. Equipped with electronic automatic constant tension controls.

MANHASSET makes a wide range of WEB PRINTING PRESSES — flexographic, gravure, letterpress, for roll-to-roll printing of cellophane, polyethylene, paper, board, etc. Also BAG-MAKING MACHINES for notion, millinery and specialty bags.

Send for specifications, performance data and prices.

MANHASSET
MACHINE CO., INC.
409 Bayview Ave., Amityville, New York

Today ...

in Tubular Paper Packaging
by Niemand Industries

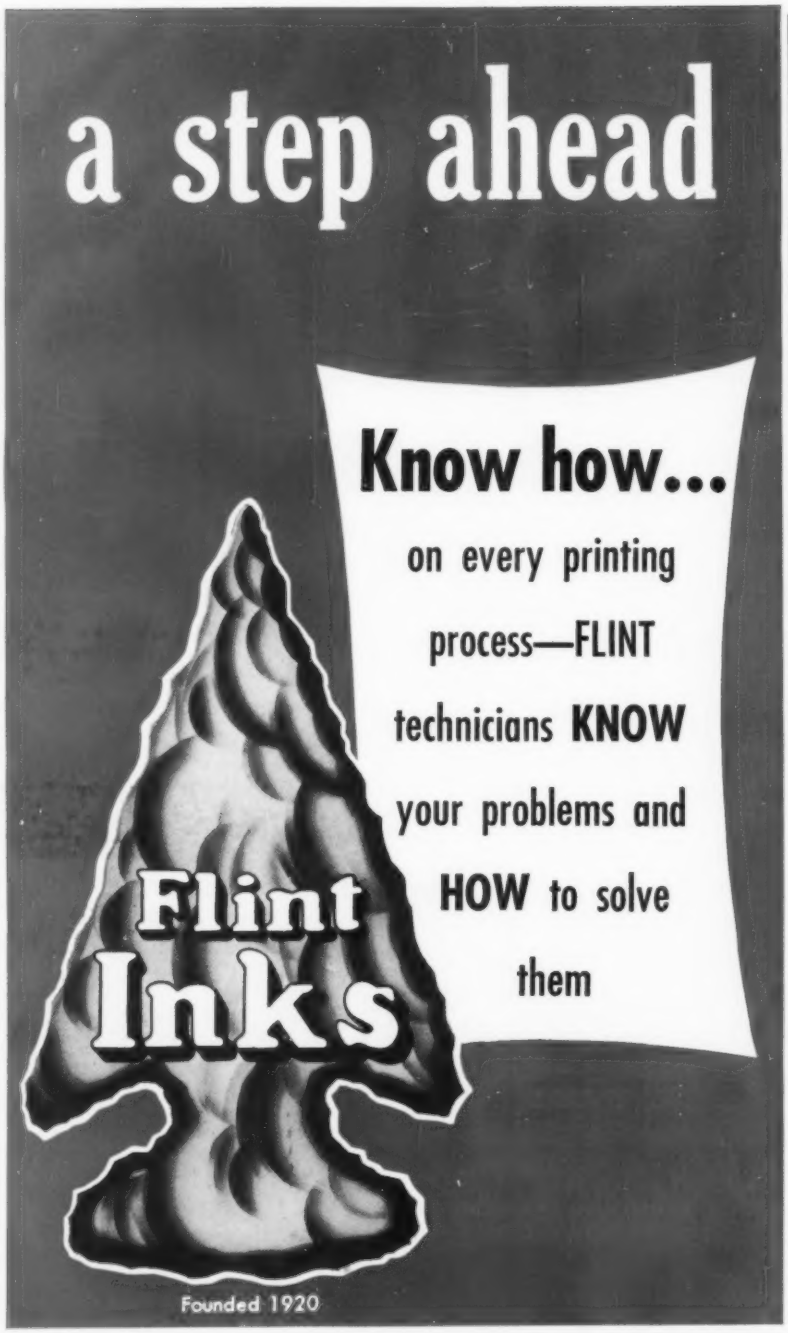
Our package engineering service
is eager to help solve your problem
— be it design, construction or cost.
Call us today.

NI

NIEMAND INDUSTRIES

Manufacturers of Paper Tube Products

2502 TAYLORSVILLE ROAD
STATESVILLE, N. C.


a step ahead
Know how...
on every printing process—FLINT technicians KNOW your problems and HOW to solve them
Flint Inks
Founded 1920

Your Packages Deserve the Best!

Flint Ink Corporation

• Gravure • Letterpress • Lithographic • Flexographic

ATLANTA • CHICAGO • CLEVELAND • DALLAS • DENVER • DETROIT • HOUSTON • INDIANAPOLIS
JACKSONVILLE • KANSAS CITY • LOS ANGELES • MINNEAPOLIS • NEW ORLEANS • NEW YORK

Flint Ink Corp. of Vermont

BENNINGTON, VERMONT

a medical-syringe filling machine to draw pre-measured amounts of brine from a drum and dispense it into the open end of the bag after the fish was inserted.

Such products as barbecued salmon, barbecued Alaska cod and smoked cod fillet are packaged in square-shaped laminated polyethylene-polyester bags that can be popped into boiling water. Copy printed on the transparent film packages calls attention to this convenience feature. LASCCO reports that sales of its smoked fish in cook-in bags during the first six months of their introduction exceeded the previous full year's sales for the same items.

A similar package for its Alaska cod tidbits, the company says, has converted this one-time loss item into a profitable seller. Formerly sold from bulk as "trimmings," the fish now is packaged in an attractive 8-oz. film bag selling for 39 cents.

Smoked salmon is the only LASCCO product that requires other than film-bag packaging. This comes in a clear saran-coated cellophane pouch within a waxed-paperboard carton having a die-cut window. The carton was adopted, according to the company, so that positive control could be exercised over the delicate shades of colored ink designed to complement the color of the salmon.

The matter of complementary coloring for all its fish packages is considered by LASCCO to be vitally important in influencing point-of-purchase buying decisions. For example, the company selected the final colors for its 3-oz. package of mild-cure sliced salmon after long experimentation and evaluation. The two shades of green used, complemented by pink lettering on the darker shade of green, tend to make the flesh of the salmon (seen through the transparent area of the bag) a little bit pinker than it would otherwise appear. This enhanced coloration is calculated to give LASCCO products a competitive edge over other brands.

Because a consumer's decision to make repeat purchases is based on product palatability, LASCCO salesmen constantly check retailers' stocks to be sure the products are fresh. To make this monitoring job easier, each bag and shipping case is embossed with a date code. This coding is particularly useful in out-of-state markets, which include the Midwest and Mexico. END

Mexico's silversmiths are world famous for their imaginative work in all types of silver objects, and especially their table ornaments and decorative pieces. This artistic skill is handed down from generation to generation, within the family shop.

Artistry in Silver

...by ARTCOTE

Artcote pyroxylin papers are available in metallic coated gold, silver, and copper finishes . . . gummed or ungummed, embossed or plain. Paper stock available in 60 lb. weight . . . cover stock available up to 15 point. All Artcote papers and cover stock accept halftone, four-color process, silk screen, gravure, offset lithography, letterpress, and flexographic printing. Write today for sample book.

Offset-printed on Artcote Silver, No. 0361

ARTCOTE®

Available through your paper dealer or from:

ARTCOTE PAPERS INC./ Irvington, New Jersey

Main Office: 386-394 Coit Street, Irvington, New Jersey
Plants at Irvington and New Shrewsbury, New Jersey

Food Packaging Council's national symposium

Food packagers got a clear picture of current developments and a glimpse of what lies ahead at the Food Packaging Council's recent National Food Packaging Symposium in Chicago's Palmer House. A capacity crowd of food processors, retailers, package designers and suppliers attended the all-day session—devoted to package merchandising at retail.

Some of the speeches were reassuring to food packagers. More were not. Retailers still object to inadequate and poorly placed price spots, jars that won't stack and uncoded and improperly sized shipping containers. On the consumer side (represented at the meeting by food editors of Chicago's four daily newspapers), the list of complaints is seemingly endless.

Housewives like convenience features in their food packages *if* they are genuine improvements rather than gimmicks. They want attractive, easily identified packages. They want to buy food products in tiptop condition. But a consumer rebellion appears to be shaping up against unduly elaborate packages out of proportion to the value of the products they contain—and which add too much to the selling price. Luxury packaging is fine for big-ticket and non-essential items. In food, the housewife seems willing to settle for fewer frills at a lower retailer cost.

Tear tapes are today's pets as far as food stores are concerned. Retailers love them. Tapes were cited repeatedly as great boons to shipping containers and food packages alike. And "tray packing"—whereby the bottom of the shipper (remaining after the tape is pulled) goes right on the shelf with contents intact—won acclaim as a cost cutter.

Some of the most virulent complaints from retailers dealt with: (1) new products which still cannot be price stamped (worst offenders are detergents and instant coffee) because caps are laden with brand names and sell copy; (2) labels so cluttered that nothing can be read quickly, including price; (3) saddle labels at the top of cellophane and polyethylene bags so large they take up valuable shelf space; (4) too-small jar caps which prevent stacking; (5) shippers which indicate where they should be opened "for easy price marking" and are then packed upside down.

Most of the retailers would like all products (especially soaps and detergents) packed for shipments in single layers to facilitate fast price marking. On the other hand, warehousers don't want these big shallow cartons because they are hard to handle on palletizing equipment. END

Dynamic design for professional line

[*Continued from page 103*]

back is left clear for full product visibility. This film gives strength to the package. One wall of the inner polyethylene bag divides the eyeglass parts to prevent scratching. Polyethylene is used because of its softness.

Whereas six different flannel bags and five acetate boxes formerly had to be stocked because of pre-printed product identification, only the two film bag sizes are now carried, one for temples and one for tops. Color, size, style and catalog numbers are added after packaging by means of a standard imprinter, employing an ink specially formulated for polyester film. This machine, which eliminates an inventory of 1½ million labels for the acetate boxes, is coupled with a computer and punch-card system for accurate product inventory. Special screws for assembling the glasses, which were difficult to secure in the plastic boxes and flannel bags, are easily fastened to a special printed spot on the plastic bags with a square piece of transparent pressure-sensitive tape.

The company's most difficult redesign job involved simplification of lens cartons. The company stocks more than 13,000 different styles, shapes, sizes and colors of eyeglass lenses. While these have always been packaged in a single size of folding carton, measuring about 2¼ in. square, attempts to achieve precise product identification actually resulted in 250 different patterns on the carton—all varying in trademark, color and over-all design. This produced a formidable inventory, even though American Optical manufactures and prints its own cartons. Many of these products have small

Creative Packaging for
SALES IMPACT

Johnson & Johnson

eye-appealing,
easy-to-use
cutter-dispenser package for

BAND-AID Plastic Tape
TRADE MARK

Another Sales-Stimulating
Packaging Achievement
Produced by

DILLON-BECK
SPECIALISTS
in
PLASTIC PACKAGING
and
CUSTOM MOLDING

COMPLETE FACILITIES
for creating, designing,
and producing
"something special"
in packaging

★ DESIGNS & MODELS
★ MOLD & DIE CONSTRUCTION
★ MOLDING & ASSEMBLY of
THERMOPLASTICS
RANGING FROM 1 to 16 OZ.

Inquiries Invited

DILLON-BECK Manufacturing Co.
Designers • Molders of Plastic Products
1227 CENTRAL AVENUE
HILLSIDE, NEW JERSEY

S|O|A|G

The SOAG MACHINERY CO. of LONDON are open to accept sales agencies from American Manufacturers of :—

(a) Paper Converting Machines.

(b) Boxmaking Equipment.

(c) Carton Printing and Boxmaking Equipment.

(d) Packaging Machinery — chiefly High Speed Cartonners and Labellers.

Complete sales organisation and coverage in the United Kingdom. Facilities for manufacturing machines under licence.

SOAG

Write in confidence to A W Chesney,

SOAG MACHINERY COMPANY

Juxon Street, London S.E.11

Telephone - Reliance 7201
Telegrams - EMDISCOY, LONDON, S.E.11 ENGLAND.

WEST MACHINES

have EASE of operation

are EASY to change

so it's EASIER to produce better products

Because they are designed and built with special engineering skill and experience, WEST machines have the extras and special features that give you a better product more efficiently.

Call or write us with your special machinery problem.

west ENGINEERING COMPANY, INC.

Dept. M1, Vawter Ave. on C & O Ry.
Richmond, Virginia
Phone MILTON 4-3057

Designers and Builders of Equipment for the Bag Industry:
BALING PRESSES • MULTIWALL BAG PRINTING PRESSES • MULTIWALL BAG SEWING MACHINES

Keystone's OKAY flexible films set your products off strikingly—add sparkle and snap to your sales!

A converter of cellophane and an extruder of polyethylene, Keystone also designs and prints . . . with an unusually distinctive flair.

But why not see our bags and roll stock for yourself? Write today for free samples, free literature and the full story on our low, low prices. Keystone Packaging Service, 1012 Washington St., Easton, Pa. *Serving the industries for more than two decades with outstanding packaging materials.*

Keystone

individual demand, yet a fairly large supply of cartons had to be printed to control converting costs.

Solution to this dilemma is a single stock carton, featuring the new design, which is surprinted with the brand name of individual lenses on a standard printing press and in small amounts as needed. A colored panel, containing code identification, is also added at this time on the top flap. Final figures on cost savings for this operation are not in because old inventories are still being used. But the savings derived from reduced storage space, more accurate product identification, more efficient converting and lower inventory loss are expected to be considerable.

The initial decision leading to these cost-cutting moves was to break with conservative design elements so familiar in this and other industries that manufacture professional products. Spurred to action by a survey showing that not even 1% of the consumer dollar is spent on eye care, American Optical came up with new packaging as the spearhead in a full-scale dealer and consumer marketing and merchandising program to bolster its own corporate identity and to emphasize the need for more attention to imperfect sight.

Consisting of a dominant white triangle on a red field, the new design is flexible enough to adapt readily to packages of every size, shape, material and construction. A strong symbol and logo now ties together the company's collection of brand names for products made by three main divisions and more than 250 branch laboratories, which are really localized manufacturing plants for making complete eyeglass prescriptions.

In the branch laboratories, special packaging problems have been solved with economical new or redesigned set-up and folding cartons for mail and messenger delivery of prescription ground glasses. All now carry the new design.

New packages for new products also incorporate the modern pattern. A fibre tube for two types of polishing pads employs an adaptation of the red-and-white label. Cleaning fluid for glass and plastic lenses is packaged in polyethylene tubes and polyethylene squeeze bottles, respectively, and both employ appropriate modifications of the basic red-and-white design. END

Don't overlook the importance of

EASY OPENING!

☆ **EASY OPENING** *is only one of* ***GUMMED TAPE's advantages!***

★ GUMMED TAPE IS LOW IN COST

★ GUMMED TAPE IS THE ONLY DUST, DIRT, AND VERMIN-PROOF CLOSURE

★ GUMMED TAPE GIVES FAST, SURE SEALING

★ GUMMED TAPE IS EASY TO USE NO EXPENSIVE EQUIPMENT

★ GUMMED TAPED CARTONS ARE RE-USABLE

Your paper merchant has exactly the right gummed tapes for you.

DARLING'S improved BONE GLUE

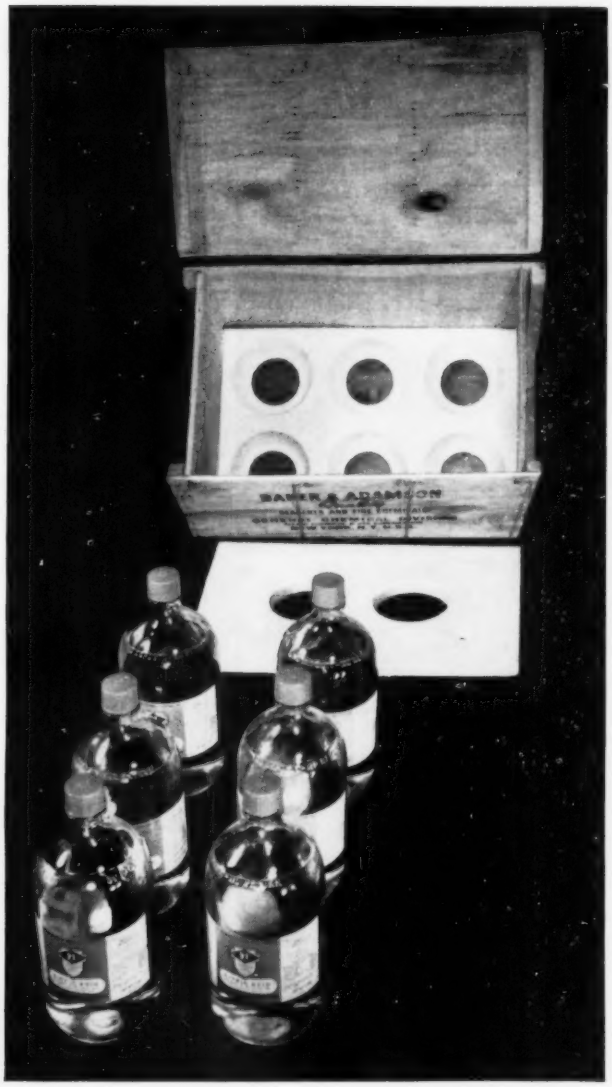
DARLING & COMPANY
GLUE DIVISION
4201 South Ashland Avenue, Chicago 9, Illinois

Suppliers of Animal Bone Glue to Gummed Tape Manufacturers

DYLITE CUTS COSTS, INSULATES AND PROVIDES SHOCK RESISTANCE IN PACKAGING

DYLITE reduces packaging costs 30%

Packaging costs have been reduced 30% since Prophylactic began using DYLITE expandable polystyrene to package Jewelite Dresser Sets. The new DYLITE package is not only low-cost; it's easier to pack—saves handling time; it's lightweight—lowers shipping costs; it's shock-resistant—less breakage in shipment. And the new DYLITE package is more attractive—makes a smart-looking display piece. *Molder: Duval Industries, Winthrop, Massachusetts*



DYLITE doubles as package and insulator

Here, DYLITE is used as a packaging material, and as a thermal insulator. This new DYLITE Kampkold container was introduced by K-APPLIANCES, Queen Products Division, Albert Lea, Minn. Kampkold keeps soft drinks cold 4 days *without ice refill*—real proof that DYLITE has excellent insulating properties. And, because Kampkold *is* made of DYLITE, it is low-cost, lightweight, strong, buoyant, corrosion-proof, colorful, and waterproof, too. *Manufacturer: K-APPLIANCES, Queen Products Division, King-Seeley Corp., Albert Lea, Minn.*

Koppers makes these fine plastics for packaging, too: **DYLENE** polystyrene, **SUPER DYLAN** polyethylene and **DYLAN** polyethylene. Wire or write Koppers Company, Inc., Plastics Division, Dept. MPG 2-19, Pittsburgh 19, Pennsylvania. TWX Call Number PG533

Offices in Principal Cities
In Canada: Dominion Anilines and Chemicals Ltd., Toronto, Ontario

KOPPERS

KOPPERS PLASTICS

DYLITE passes rigid shock tests

Early this year, General Chemical Division, Allied Chemical Corp., New York, conducted drop tests to determine how much protection shock-absorbent DYLITE would give their B&A reagent nitric acid bottles in shipment. A molded DYLITE pad was placed in the box; the bottles were fitted into the pad; another molded DYLITE pad was placed over the bottles; and the box was sealed. The 42-pound box was then dropped six times—distances of 12 inches and 18 inches. RESULT: *No damage to bottles.* As a result of these and other tests, General Chemical now uses this container with great success. *Molder: Star Band Company, Portsmouth, Virginia.*

Typical Properties of DYLITE—Density 2 Lbs./Cu. Ft.

- Compressive Strength—30 Psi
- Tensile Strength—55 Psi
- Water Vapor Transmission—1.18 Perms.
- Water Absorption—0.54 Lbs./Cu. Ft. After 48 Hrs. Immersion
- Thermal Conductivity (K Factor)—0.242 at a 75°F. Mean Temperature
- Energy Absorption (Maximum Load)—56.74 In. Lbs /Cu. In.

DYLITE, DYLENE, SUPER DYLAN and DYLAN are registered trademarks of Koppers Company, Inc.

When your success is at their fingertips—

RISDON VALVE QUALITY IS VITAL INSURANCE

Risdon aerosol valve *quality* . . . performance-proven on many millions of packages, gives full assurance of customer-pleasing results over the entire package life.

An inferior valve can be your most expensive "bargain." Insure success — specify Risdon.

Write For Free Booklets On RISDON Valves

FOR Pressurized Products Packaged in Glass, Metal or Plastic Containers.

DISPENSING Conventional Aerosols, 3-Phase Products, Alcohol Base Products, Water-Base Products, Foam Products, Powder Sprays, Metered Sprays, Ultra-Low Pressure Applications, Products Containing Propellent Emulsions or Dispersions, etc.

RISDON THE RISDON MANUFACTURING CO.

Valve Division Naugatuck, Conn.

Informative labeling contest winners

Grand Award in The Society of the Plastics Industry's Fourth Annual Informative Labeling Contest, held recently in New York, went to four labels for garden hose made by Gering Products, Inc., Kenilworth, N. J. This entry also won first place in the Hardware category.

Several of the judges were of the opinion that an improvement over previous years was noticeable both in the quality of the informative material submitted and the plastics products to which it applied. Surprise was expressed at the absence of the word "plastics" in the literature presented. It was pointed out that if "plastics" is not mentioned, the primary objective of the informative label—to sell plastics and expand consumer acceptance of plastic—has been lost sight of by the manufacturer.

Eight other Category Awards were selected from the 105 different entries from 49 companies:

Apparel, tie tag for Scottfoam interlining by Scott Paper Co.'s Foam Div., Chester, Pa.

Building Materials, labeling on box of Miracle Tape by Gering Products, Inc.

Floor & Wall Covering, labeling on back of Sculpture Con-Tact by Cohn-Hall-Marx Co.'s Comark Plastics Div., New York.

Home Furnishings, label for Farlite table top by Farley & Loetscher Mfg. Co.'s Plastics Div., Dubuque, Iowa.

Housewares, booklet, "Cold Facts," and labels for Cymac and Cymac Super, American Cyanamid Co.'s Plastics & Resins Div., New York.

Notions, counter cards for Risdon self-cover buttons, The Risdon Mfg. Co., Naugatuck, Conn.

Toys, label on toy bucket and TV seat by Federal Tool Corp., Chicago.

Miscellaneous, folder and instruction card for Kem plastic playing cards by Kem Plastic Playing Cards, Inc., New York.

Judges of the event were: Guin Hall, *New York Herald Tribune*; Ephraim Freedman, R. H. Macy & Co.; Leslie Corner, *Department Store Economist*; Charlotte Montgomery, *Good Housekeeping*; Richard Roy, Frederick Atkins, Inc.; Julien Elfenbein, *Housewares Review*; Doris Tobias, *Supermarket News*; Arthur Pieper, *House & Home*; William A. Phair, *Hardware Age*; Walter Joyce, *Printer's Ink*. END

Million-dollar pajama package

[*Continued from page 81*]

package, it is reasoned, when a glance at the insert picture shows exactly how the pajamas or nightgown look on the figure. The insert copy also gives all the information a shopper would want to know about the fabric and how to wash it, plus size, style number, price and other detail. And, of course, no opening is necessary to show colors and fabric designs, which are visible through the transparent package.

The use of the pictorial inserts represents a substantial economy, the company points out, inasmuch as it permits bags printed only with the company's trademark to be used interchangeably for a large number of different Schrank items, eliminating a differently printed bag for every item.

To spur multiple sales, all the polyethylene packages are of a special dual construction to hold two duplicate items, with a printed notation, "If one is wanted, tear here—but why not take two?" There is a perforated line where the package may be separated if the customer decides to take only one.

Every item is price marked by pre-ticketing, which is part of the illustrated insert. This is a big time and labor saver for the retailer. This pre-ticketing supposedly also assures better unit control, because the tear-off sections of the tickets provide a record of every sale.

With its new packaging program, Schrank offers stores a permanent self-selection fixture in a choice of woods at a below-cost price. The fixture stocks up to 20 dozen packages, the contents of which are illustrated by full-color photographic reproductions of Schrank fashions inserted at top of the unit. Success of the program is indicated by the company's report that 2,000 of these fixtures have already been installed in department stores and specialty shops throughout the country. END

Peters

Carton & Tray Forming & Gluing or Heat Sealing Machine

automatically converts up to 180 poly-coated or uncoated blanks per minute

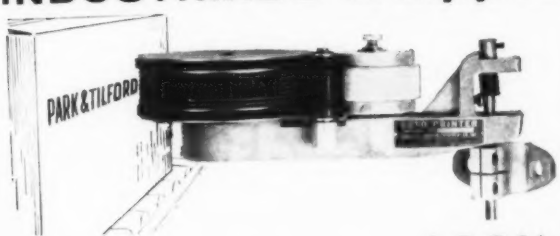
At cost-cutting high speeds, Peters SG-P Carton and Tray Forming and Gluing or Heat Sealing Machine automatically converts poly-coated and uncoated blanks into perfectly shaped heat-sealed or glued cartons and trays for packaging frozen foods, cookies, fig bars, crackers and specialty products. Write for catalog describing this and other Peters packaging machines.

let our engineers show you how Peters can help you do a better job faster—and at lower cost!

For 60 years originators and builders of high speed automatic packaging and bakery machines.

Peters MACHINERY COMPANY
4712 Ravenswood Ave. • Chicago 40, Ill.
All Phones: LOngbeach 1-9000

NO. 1 SPECIALIST IN THE MARKING FIELD INDUSTRIAL'S Whippet



What Makes it First?... LOOK:

Versatility . . . automatically imprints cartons, bags, rolls, cans, containers and packages — as you need them during production line runs.

Low cost . . . "Whippet" sells low, seldom requires attention or maintenance.

Capacity . . . works non-stop at production lines speeds. No misses or overprints.

Simple Operation . . . attaches quickly and easily direct to conveyor line; non-oscillating friction head uses interchangeable rubber type for clear, legible impressions.

Saves . . . expensive hand stencilling, pre-printing, storage and inventory costs.

Proved practical and economical on almost any marking problem — in plants all over the country — "Whippet" is so simple, well designed and manufactured that experience proves they serve faithfully and profitably far beyond ordinary equipment. See how they can improve your operation.

Write for details and catalog today! Dept. MP

ime INDUSTRIAL MARKING EQUIPMENT
655 BERRIMAN ST. | company, Inc.
BROOKLYN 8, N.Y. | NI 9-3305

"REFUTE YOUR COMPETITORS' ARGUMENTS — DON'T IGNORE THEM"

writes Dr. H. Kay in **PRINTERS' INK MAGAZINE,** Oct. 29, 1958.

Only Machine that Automatically Tapes Over 2000 New or Re-use Cartons Per Hour
...and reduces labor costs as much as 80%, too!

WE CHALLENGE THE ABOVE COMPETITORS' ARGUMENTS TAKEN FROM THEIR RECENT ADS.

These claims influenced plants* into buying this manufacturer's machines. We know they failed to live up to these claims because those plants are replacing these same machines with ours and are now very happy. ***Names on request.**

Case Seal the Modern GENERAL *Way*

- Because **GENERAL'S** new TAPE rip-cord applicator attachment really makes containers easier to open without injury to persons, contents or cases. Permits longer re-use life.
  This device Automatically applies rip-cord along the Centerline to the gum side of sealing tapes with convenient pull tab at both ends.
- Because **GENERAL'S** exclusive delayed action bonds the extended tape ends onto the end panels securely, with no "tenting".
- Because **GENERAL** tapes up to 30 or more cases per minute, single strip, top and/or bottom flaps only, plus end panels as required.
- Because **GENERAL'S** application of gummed tape also makes a dust and pilfer-proof seal.
- Because **GENERAL'S** new simplified tape-wetting system can make tape highly water resistant, when required.
- Because **GENERAL'S** Automatic Tape Sealer moistens tape best—eliminates tape waste and THE WEAKNESSES OF HAND APPLICATION. There's no comparison.
- Because **GENERAL** does the many difficult tape sealing jobs other makes simply can not do.
- Because **GENERAL'S** new non-skid attachment can provide non-skid surface to tops of containers for safer shipments. Non-skid application here is much more efficient than at any prior stage.

Q. E. D. GENERAL'S tape sealers are best. They have no equal.

MANY INDUSTRIES ARE USING GENERAL'S Tape Sealers:

Aluminum Co. of America
Armstrong Cork Co.
Atlantic Gummed Paper Co.
Birkel Co. (Noodle Mfg.) W. Germany
P. Ballantine & Sons
Blatz Brewery
Brown & Williamson Tobacco Co.
Cervecería India, Inc. (P. Rico Brew.)
Continental—Bond Crown Div.
Corning Glass Works
The Kroger Co.
Crown Cork & Seal Co.
Diamond Fertilizer
Duquesne Brewery Co.
Genessee Brewing Co.
Liggett & Myers Tobacco Co.
Mundet Cork Corp.
Pabst Brewing Co.
Pepperidge Farm Bakery
Pet Milk Co.
Jos. Schlitz Brewing Co.
Westinghouse Electric Co.
Wise Potato Chips
Cía. Mfra. de Cigarros "El Aquila" S.A.
International Business Machines Co.

GENERAL'S Carton-maker Bottom-flap Gluer and/or taper, of unfilled cartons is also available to seal top flaps after filling, a two-purpose machine. Gluer is closed system. "It's already ready." Saves ½ hour "make-ready" and "clean-up" time daily per line. CLOSED-SYSTEMS can replace glue pot method in other machines now in use.
Also, Tape Sealing Machines for book-wraps, records, folders, magazine wraps, telescope boxes, slide boxes, etc.

IT COSTS TO PUT OFF . . . WIRE OR PHONE NOW

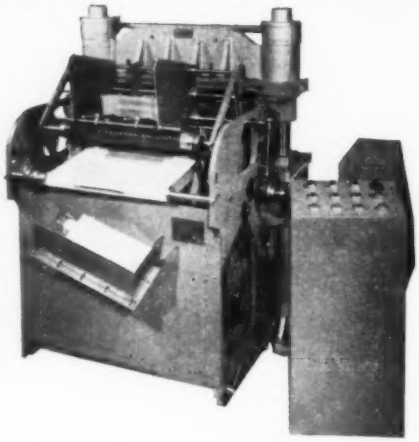
GENERAL CORRUGATED MACHINERY CO., INC.

PALISADES PARK 16 **WIndsor 4-0644** **NEW JERSEY**

GENCO, Palisades Park, N.J. and Hamburg, Germany

Only the *FAUSTEL* METAL TEAR EDGER

Offers...



• SIZE

Handles all size carton blanks from 7" to 24" in width, including tabs, and from 8½" to 12" in length. Special machines available to handle greater lengths or other variations.

• CHANGEOVER

Changeover from one size to another in *15 minutes*. This exclusive Faustel feature presents a very definite production advantage.

• DIE CHANGES

Feeder separates from press, making die changes possible in less than ½ hour.

• GUARANTEED SPEED

The Faustel machine is capable of attaching metal tear edges to all size cartons at the *guaranteed rate of 150 per minute*, provided we furnish the complete unit, including dies, or are consulted in the die construction.

FAUSTEL

Complete information and specifications available — call, write or wire today.

FAUSTEL ENGINEERING, Inc.

5109-B North 125th Street • BUTLER, WISCONSIN

(Suburb of Milwaukee)

FAUSTEL ALSO DESIGNS AND MANUFACTURES BAG MACHINES, FLEXOGRAPHIC AND ROTOGRAVURE PRESSES, LAMINATORS, AND GENERAL CONVERTING OR SPECIAL MACHINERY

Can you answer "YES" to these 3 questions?

1 Are you aware of all the ways in which plastics can improve your product?

2 Are you familiar with all the new plastics materials now available?

3 Do you know the properties of these materials and how they can be employed to better your product?

You *should* be able to answer "yes," because plastics are constantly growing in importance. If you manufacture or package a product, chances are plastics can profitably be put to use in your business.

Fortunately there is an easy solution: Modern Plastics magazine is the world's most authoritative monthly publication devoted exclusively to the application and use of plastics for all kinds of products.

And a twelve month subscription, including the giant annual Encyclopedia Issue, costs only $7.00 in the United States and Canada; other countries, $25.00. Why not send your order now!

MODERN PLASTICS

575 Madison Avenue • New York 22, N. Y.

Container trends

Increasing demand and ample supply" is a phrase that aptly sums up the present over-all status of the container industries, according to a report by the Containers Committee of the National Assn. of Purchasing Agents. The report points out that there is a definite trend—particularly among metal-, glass- and corrugated-container suppliers—toward a more stabilized pricing policy.

Another trend cited is design improvements calculated to increase suppliers' sales. These improvements are reported as easier-opening containers, packages with built-in metering devices, metering and dispensing fitments, handles, "heat-and-eat" foil containers and better shelf-stacking features.

Plastic containers are singled out in the report as being in many ways "the healthiest phase of the packaging industry" from a cost standpoint. The report notes that many plastic-package suppliers have been able to reduce their prices (and thereby reduce retail prices) thanks to the development of improved, lower-cost methods of production.

As regards glass packaging, the report points out that the latest price increase has been offset to a great degree by the recent strides made in the weight reduction of glass containers. (See "Glass Goes Lighter Still," MODERN PACKAGING, Dec., 1958, p. 75.) END

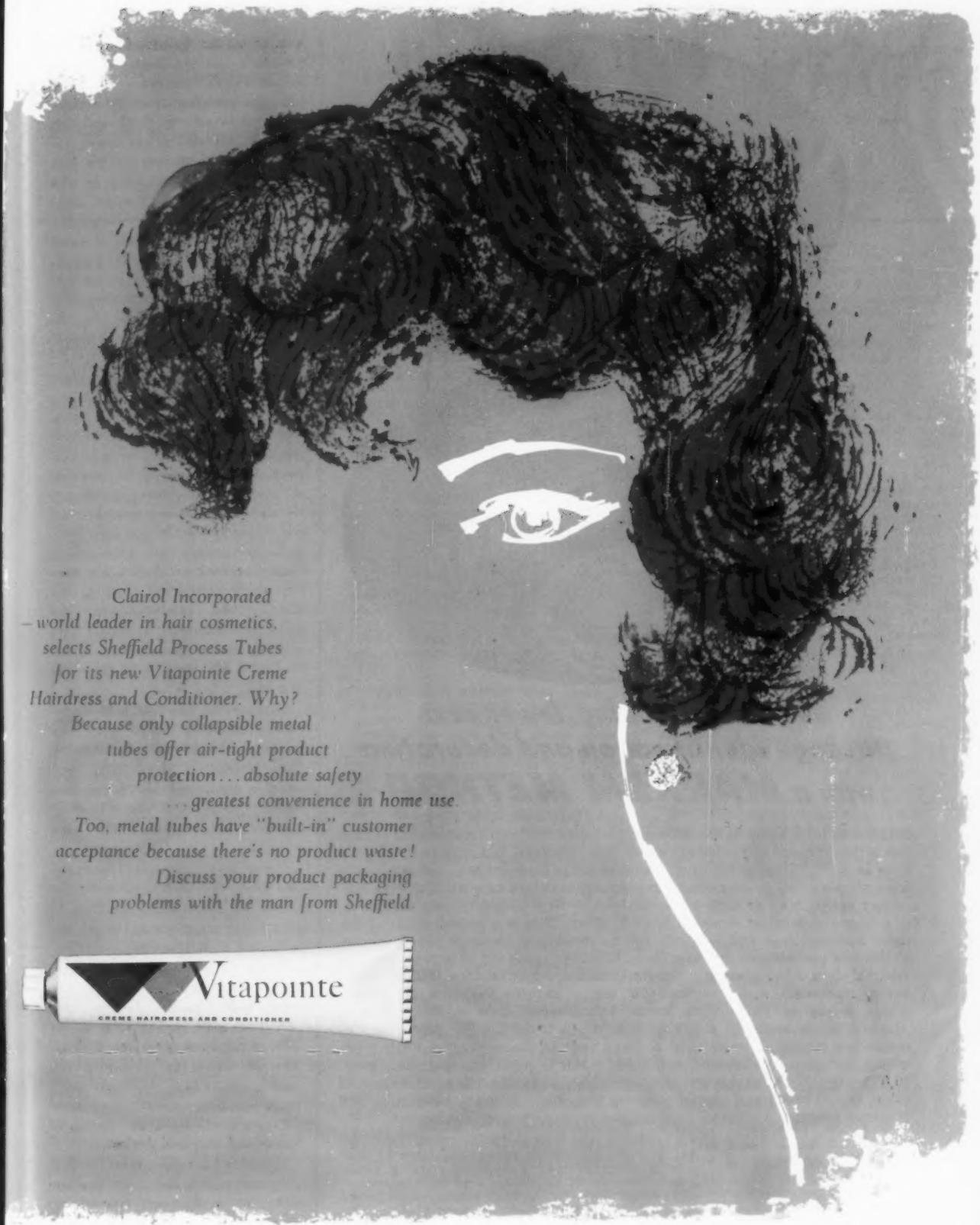
No-contact glass lines

[*Continued from page 93*]

the final labeling and casing line. Because the rods press on the divider instead of the case, the divider stays with the case and is removed gently and cleanly from the glass, despite a rather snug fit.

The 24 jars, each suspended from a finger and thus prevented from contact, are next deposited on a chain-mounted aluminum platen, where the finger rods are again elongated, permitting the fingers to slip gently from the jars.

The platen has a transverse-channeled surface and is lubricated by a spray of soap solution just before rising into position. As the platen moves down the center of the washing machine, plows on either side slide the glass jars, in groups of

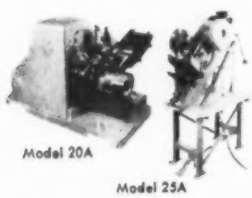

Clairol Incorporated
– world leader in hair cosmetics,
selects Sheffield Process Tubes
for its new Vitapointe Creme
Hairdress and Conditioner. Why?
Because only collapsible metal
tubes offer air-tight product
protection . . . absolute safety
. . . greatest convenience in home use.
Too, metal tubes have "built-in" customer
acceptance because there's no product waste!
Discuss your product packaging
problems with the man from Sheffield.
Vitapointe
CREME HAIRDRESS AND CONDITIONER

SHEFFIELD TUBE CORPORATION... ESTABLISHED [illegible]

SHEFFIELD TUBES

Get better looking, lower cost package identification and decoration with a MARKEM METHOD

Hand stamping, using decals, stenciling — such methods can not only reduce the attractiveness and sales appeal of your package, but consume valuable time as well. "Outside printing" requires large inventories . . . causes waste from obsolescence . . . can result in production delays as well. The time and money saving way around these obstacles — with added quality besides — is a Markem Method working in your plant. This is a combination of the right *machine, type* and *specialty ink* to *identify* or *decorate your packages* at the *rate you need, as you need them.* Whether you want to screen decorate designs on molded plastics . . . print pressure sensitive tape with product name, trademark and directions for use . . . imprint variables on bakery labels, set-up or flat folding boxes, lithographed cans or lids — there's Markem equipment and a proven method for the job. The two machines shown are typical of more than a dozen used in the packaging field; type-wheels, or masterplates and typebars, make imprint changes fast, easy; 10,000 currently available specialty inks offer virtually any combination of color, drying speed and special property you want. In many cases, Unitized Markem printing heads can be combined with packaging equipment.



Ask Markem for specific recommendations to meet *your* identification and decoration marking needs. Nearly 50 years of experience — in all industries — and a single source for the *whole* answer, stand behind every Markem quote. Write Markem Machine Co., Keene 1, New Hampshire.

MARKEM

EVERYTHING INDUSTRY NEEDS . . . FOR PROFITABLE MARKING . . . SINCE 1911

four, across the channeled surface of the platen and into single file on two pocketed link conveyors equipped with guides that hold the jars loosely between the finish and the shoulder. Inverted in the lower, return side of the conveyors, the jars are prevented from falling by the guides and side rails prevent shifting as the jars are thoroughly washed by powerful sprays of water ranging from 190 to 200 deg. F. As the conveyors return to the top position, the containers are shunted first to an outer position on the belts, then to two pocketed transfer link belts.

At this point, the two lines of glass are each moving at a rate of 330 jars per minute. To combine them into a single line traveling at about 660 jars per minute, Gerber employs two pairs of pocketed link belts traveling at progressively faster speeds. A V-shaped wiper converges the two glass lines across the speed-up belts and synchronizes both lines into a single-pocketed link belt in the center, which carries the glass to the filler. At the point where the two glass lines converge, a hinged gate and switch are positioned to spring open and stop the line in the event of a jam.

Because the glass is held under timing control by the pocketed feed belt, a star-wheel feed is used at the filler instead of the conventional auger or screw feed. This is to insure that at this point of potential damage the jars do not contact each other.

Rigid plastic canopies cover the jars from the time they enter the washer until they reach the filler, to prevent any contamination of the glassware after cleaning.

While the present integrated lines stop at the capping station, they prevent practically all of the jar damage in the glass packaging line. The bulk of the damage on conventional lines occurs in unscrambling and feeding the empty containers, which surge together constantly because of conveyor friction and the motion of screw- and star-feed devices.

Integrated handling from the capping station—involving the development of continuous cookers to bridge the gap between the packaging functions of filling and final labeling and casing—will be an extremely difficult task. But, Gerber is working on this problem, too. END

1. SELECT the items you want
2. CIRCLE the corresponding numbers on the post card
3. FILL IN the information requested
4. MAIL — no postage required

HELPFUL LITERATURE FREE

There is valuable data — worth dollars and cents to you — in the literature and samples described below.

EQUIPMENT • SUPPLIES • SERVICES

CUTTING AND CREASING PRESSES. 4-page illustrated brochure describes a series of crank-action cutting and creasing presses up to 28 by 41 inches in size, and capable of up to 2,250 impressions per hour. Presses feature an adjustment that eliminates stoppages during a run to correct makeready settling. Thomson-National Press Co., Inc. **(A-950)**

PLASTIC UTILITY BOXES. Illustrated catalog gives specifications and prices for a line of stock, molded, rigid plastic utility boxes. Also describes tomato and tackle trays, and a bow tie box. Gilbert Plastics, Inc. **(A-951)**

PLASTIC SQUEEZE BOTTLES. 12-page illustrated brochure describes this California company's facilities for the manufacture of plastic squeeze bottles, together with caps and fitments. Company also makes one-piece polyethylene vial with attached cap. Olympic Plastics Co., Inc. **(A-952)**

BOX-MAKING MACHINE. 8-page illustrated brochure describes a line of automatic box-making machines capable of handling blank sizes up to 31 by 22½ inches, and producing up to 100 boxes per min. Machines are designed for integrated or continuous box making, where each wrapper has its own quad stayer. New Jersey Machine Corp. **(A-953)**

TAG-MAKING PRESS. Illustrated data sheet describes a line of tag presses that receive webs of paper from roll stock at one end and deliver completed tags at the other end, all in one operation. Production rates range up to 45,000 tags per hour. New Era Mfg. Co. **(A-954)**

CARTON UNLOADER. 4-page illustrated brochure describes an automatic carton unloader that lifts containers out of cartons right side up, rejects all broken containers, and can be changed over from one size to another in less than 5 minutes. Island Equipment Corp. **(A-955)**

BOTTLE-COTTONING MACHINE. 4-page illustrated brochure describes an automatic machine that inserts cotton into bottles of capsules and tablets at rates up to 100 bottles per min. The Lakso Co., Inc. **(A-956)**

ROLL LEAF STAMPING EQUIPMENT. 4-page illustrated brochure describes a line of hand- and air-operated presses for roll leaf stamping. Machines operate at speeds up to 2,000 pieces per hour. Olsenmark Corp. **(A-957)**

ADHESIVES FOR FOIL DETERGENT CARTONS. Handbook describes a line of adhesives and their application in the lamination, forming and closure of foil detergent and similar cartons. Foil Adhesion Dept., Polymer Industries, Inc. **(A-958)**

CAPPING MACHINES. Illustrated booklet traces this company's history and describes its bundling, multiple wrapping, banding, high-speed wrapping and stamping machines. Scandia Packaging Machinery Co. **(A-959)**

SHEET PLASTIC FOLDING AND CREASING MACHINES. Illustrated brochures describe a combination folder-creaser for rigid thermoplastic sheets and a machine for folding edges of cellulose acetate and ethyl cellulose blister packages. Taber Instrument Corp. **(A-960)**

PACKAGING EQUIPMENT. 8-page catalog lists available screw cappers, tube fillers, piston fillers, gluers and sealers, labellers and related equipment available for purchase from this company. First Machinery Corp. **(A-961)**

WEB GUIDE EQUIPMENT. 6-page illustrated brochure describes hydraulic vacuum principal and vacuum web guides for operation on printing, coding, laminating and slitting equipment. Stanford Engineering Co. **(A-962)**

INDUSTRIAL MARKING EQUIPMENT. 4-page illustrated brochure describes marking, dating and coding machines. Includes flexographic printer, special carton marker, egg carton imprinter, case sealer marking attachment, automatic bundle printer, etc. Industrial Marking Equipment Co., Inc. **(A-963)**

INSERTER AND CAPPER. Data sheets describe a machine that assembles spray nozzle closures and then automatically inserts them into filled plastic squeeze bottles at speeds up to 60 per min.; also a machine that caps bottles with brushes, applicators and droppers at speeds up to 160 per min. PMC Industries. **(A-964)**

ASSORTED PACKAGING EQUIPMENT. Series of illustrated brochures describes a bag sealer, a line of automatic scales and baggers, automatic bottle wadding equipment, a line of automatic cappers, and an overcapping machine for aerosols. Consolidated Packaging Machinery Corp. **(A-965)**

CARTONING MACHINE. Illustrated 8-page brochure gives detailed analysis of the design, construction and operating features of a high speed automatic cartoner. R. A. Jones & Co., Inc. **(A-966)**

AEROSOL PACKAGING EQUIPMENT. Illustrated 4-page booklet gives features of an aerosol pressure charging unit; an automatic, 2-stream filling machine; a rotary pressure vacuum filler; a compressed air bottle cleaner; and other aerosol packaging machinery. The Karl Kiefer Machine Co. **(A-967)**

SELF-STICKING LABELS. Series of catalog file booklets describes, pictures and lists prices for self-sticking die-cut labels for use in identification, sales promotion, instruction, coding and pricing. Paramount Paper Products Co. **(A-968)**

RIGID PLASTIC CONTAINERS. 4-page illustrated catalog lists available threaded, shell, shoulder and beaded containers for packaging medical products, cosmetics, jewelry, sporting goods, handicrafts, food, etc. Also lists available metal and plastic closures. Lermer Plastics, Inc. **(A-969)**

CORRUGATED BOXES. Illustrated 30-page booklet describes basic corrugated box styles designed to solve the problems of original packing, handling, storage, stacking, and unloading. Hinde & Dauch. **(A-970)**

POLYSTYRENE CONTAINERS. 4-page illustrated brochure discusses advantages of this company's rigid plastic lids; snap-on and snap-in cap containers; and meat, vegetable and poultry trays. Klear-Plastics Div., Crompton & Knowles. **(A-971)**

FLEXOGRAPHIC AND ROTOGRAVURE PRESSES. 4-page illustrated brochure describes miniature to 40 in. presses that print on paper, foil, cellophane, polyethylene and other films in single or multi-color operation up to four colors. Helix Machine Co., Inc. **(A-972)**

Fill out and mail this card now

MODERN PACKAGING

MANUFACTURERS' LITERATURE SERVICE

Please send me the free items circled below. ☐ **I am a non-subscriber*** **I am** ☐ **a subscriber**

A-950 A-951 A-952 A-953 A-954 A-955 A-956 A-957 A-958 A-959 A-960
A-961 A-962 A-963 A-964 A-965 A-966 A-967 A-968 A-969 A-970 A-971
A-972 A-973 A-974 A-975 A-976 A-977 A-978 A-979 A-980 A-981 A-982
A-983 A-984 A-985 A-986 A-987 A-988 A-989 A-990 A-991 A-992 A-993

*If you do *not* have a personal subscription and would like to receive the next twelve monthly issues plus the next annual Encyclopedia Issue (U.S.A. & Canada, $7.00; all others, $25.00) please check below.

☐ Check enclosed ☐ Send bill

NAME ..... POSITION .....
(Please Print Plainly)

COMPANY .....

STREET ..... CITY ..... STATE .....

(This card cannot be honored after April 15, 1959)

FREE HELPFUL LITERATURE

There is valuable data—worth dollars and cents to you—in the literature and samples described below.

1. SELECT the items you want
2. CIRCLE the corresponding numbers on the post card
3. FILL IN the information requested
4. MAIL—no postage required

EQUIPMENT • SUPPLIES • SERVICES

HEAT SEALING AND PACKAGING MACHINES. Illustrated catalog describes a pneumatic heat sealer, a line of heat sealing crimpers, tablet and liquid unit packagers, and automatic candy pop wrapping machine, etc. Wrap-Ade Machine Co., Inc. **(A-973)**

CONVEYOR BELTING. 8-page illustrated brochure describes conveyor belting for light-to-medium duty service in handling packages, foods, light industrial goods; for incline service, handling packages; and for heavy-duty service, handling foods. Mechanical Goods Div., U.S. Rubber Co. **(A-974)**

GLASSINE & GREASEPROOF PAPERS. 4-page illustrated brochure describes the features of this company's glassine and greaseproof papers as carton liners and dividers, package overwraps, canister and fiber tube laminations, candy and cookie cups, retail food service wraps, etc. Rhinelander Paper Co. **(A-975)**

METAL AND FIBER CANS. 8-page illustrated brochure describes this company's lines of convolutely wound cans, spirally wound cans, metal-end tops, moisture and grease resistant wraps and liners, caulking cartridges and specialty items. R. C. Can Company. **(A-976)**

BAGS AND COVERS. 16-page illustrated brochure describes this company's facilities for manufacturing paper, film and foil shipping box liners, shoe bags, stove display covers, toy bags, vault covers, refrigerator bags, oxygen tent canopies, etc. Kennedy Car Liner and Bag Co., Inc. **(A-977)**

MOLDED INTERIOR SHAPES. 4-page illustrated brochure describes molded pulp shapes for packaging electrical parts, glassware, light bulbs, plants, eggs, vegetables, fruits, etc. Keyes Fibre Co. **(A-978)**

CORROSIVE CHEMICAL SHIPPERS. Illustrated brochures describe a combination polyethylene bottle and steel outer-jacket, and a combination polyethylene liner and steel pail, for the shipment of food syrups, photographic chemicals, germicides, acids, alkalis, pharmaceuticals, etc. Container Div., Jones & Laughlin Steel Corp. **(A-979)**

PACKAGING MACHINERY. Illustrated brochure describes a line of automatic cartoning machines that pack up to 200 tubes, bottles and vials per min.; a line of machines that fill and close tubes at up to 85 per minute; and a line of machines that pack powdered and granular products into preformed flat bags at rates up to 180 packages per minute; etc. Industrie-Werke Karlsruhe. **(A-980)**

INKS FOR OFFSET LITHOGRAPHY. Series of technical bulletins discuss the solution of common press room problems in lithography, including the limitations of ink adjustments to paper, ink in relation to makeready, how to choose the right ink, etc. Printing Ink Div., Interchemical Corp. **(A-981)**

SILICONE COATING. 4-page illustrated brochure describes a permanent, water-repellent silicone coating for paper and paperboard that keeps gummy and tacky materials from sticking to all types of bags, boxes, interliners, wraps and interleaving sheets. Dow Corning Corp. **(A-982)**

AUTOMATIC FILLERS. File folder catalog sheets describe a line of volumetric fillers for filling liquid into bottles, jars and cans; a line of automatic tube fillers for filling creams and liquids into tubes; a line of filler, closure, crimper and ejector machines for filling pastes, creams, liquids into tubes, bottles, jars or cans; etc. Arthur Colton Co. **(A-983)**

CORRUGATED BOXES AS SALES AIDS. 4-page illustrated brochure points out promotional value of attractively printed "merchandising" boxes, display shippers and display stands. Gaylord Container Corp., Div. of Crown Zellerbach Corp. **(A-984)**

STAPLING TOOLS. Illustrated 8-page brochure describes 50 stapling tools for bottom-sealing paperboard shipping containers, top-sealing corrugated and solid fiber construction, assembling multi-piece corrugated and solid fiber containers, sealing bags and corrugated wrappings, etc. Bostitch. **(A-985)**

POLYETHYLENE. 14-page technical bulletin lists the grades, electrical and chemical properties, etc., of this company's polyethylene for use in the manufacture of fiber milk containers, wrappers for packages, and boxboard, butter cartons and laminated containers. Semet Solvay Petrochemical Div., Allied Chemical. **(A-986)**

SPECIALIZED METAL CONTAINERS. 12-page brochure gives illustrated case histories of companies that solved their packaging problems through use of this company's specialized lithographed metal containers. J. L. Clark Manufacturing Co. **(A-987)**

WRAPPING MACHINES. 15-page illustrated brochure describes machines for the wrapping of baked goods, meats, textiles, frozen foods, paper products, etc. Also describes a line of machines for box making. Battle Creek Packaging Machines, Inc. **(A-988)**

CLOSURES AND SEALING MACHINES. 16-page illustrated brochure describes features of lines of caps for vacuum sealing, sterilizing, processing, hot packing. Also describes an automatic straight line steam vacuum capping machine, a 16 spindle rotary sealing machine and a four-head rotary sealing machine. Anchor Hocking Glass Corp. **(A-989)**

TRADE PAINT SALES SURVEY. 24-page booklet analyzes current and projected demand for paint by consumers and jobbers. American Can Co. **(A-990)**

LABELS, SEALS, TAGS. Kit contains samples of tags, labels, and seals on foil and paper. Items are embossed, die cut, and bronzed. Cameo Die & Label Co. **(A-991)**

MOISTURE-PROOF PACKAGES. 4-page illustrated brochure describes features of kraft-polyethylene bags for packaging hygroscopic products such as dried milk, instant potatoes, powdered cocoa, ice cream mix, instant coffee, sugar, flour, salt, spices, etc. Western-Waxide Div., Crown Zellerbach Corp. **(A-992)**

SLIDE PACKAGE FORMER, BLISTER SEALERS. 4-page illustrated brochure describes a blister package sealer, a turn-table blister sealer, a junior blister sealer; and a slide package former that produces a flange fold or folds, and packages slide card and product in one operation. Tronomatic Machine & Mfg. Corp. **(A-993)**

Fill out and mail this card now

Postage Will be Paid by Addressee

No Postage Stamp Necessary If Mailed in the United States

BUSINESS REPLY CARD
First Class Permit No. 2656 (Sec. 34.9, P. L. & R.), New York, N. Y.

MODERN PACKAGING

Viliage Station Box No. 103

New York 14, N. Y.

KEEP YOUR PACKAGE ABLAZE

New, Ready-Mixed

IC* Metallic Paper Coatings

Non-tarnishing! Non-fading! Non-bleeding! Non-smudging! Non-gelling!

To give your package a brilliant sparkle that will STAY that way however long it remains on display, be sure it's coated with an IC Metallic Paper Coating.

Available in a broad range of iridescent pastels as well as brilliant aluminum, gold and copper shades, IC Metallic Paper Coatings are *ready-to-use!* No more messy mixing on the job! No more wasted overage! No more fear of gellation or loss of brilliance in storage! IC Metallic Paper Coatings can be overprinted with transparent or opaque inks providing unlimited decorative possibilities.

Investigate this LOW COST method of producing metallic effects. Contact your nearest Interchemical representative NOW for details.

Put this page to your own test. Notice its metallic brilliance. Test its resistance to tarnishing, fading, bleeding and smudging. See how effectively it will keep YOUR package ablaze!

Interchemical
CORPORATION
Finishes Division

Headquarters office: 216 McWhorter St., Newark 5, N.J. • Factories: Chicago, Ill.; Cincinnati, Ohio; Elizabeth, N.J.; Los Angeles, Cal.; Newark, N.J.; Mexico City, Mex. • In Canada, these products are made by Aircraft Paints, Limited, Toronto, Ontario, and sold under its trademarks • *IC is a trademark of Interchemical Corporation

Protective drum liner

Foote Mineral Co. of Philadelphia reports that it has solved a critical problem in the bulk packaging of a corrosive and highly hygroscopic air-conditioner chemical by adopting a steel drum with a pigmented phenolic-type interior liner as the shipping unit.

According to the company, the chemical-resistant liner guarantees product protection and prevents container damage for three months or longer. Drum-filling ease is promoted by the liner's uniform coverage and its tendency to adhere to the surface of the metal.

SUPPLIES AND SERVICES: Interior-lined steel drum by Jones & Laughlin Steel Corp., Pittsburgh 30.

The challenges ahead

[*Continued from page 78*]

what retailers and customers need in package function.

5. Shrewd appraisal of packaging opportunities that competitors overlooked.

6. Aggressiveness and boldness in developing new packages.

7. Programmed research, testing and new-package planning.

Marketers who will lead the way in posting merchandising gains this year will use packages strategically to hold and win customers.

Packaging research will be one of the best tools marketers can use.[7] Probably less than 10% of companies whose packages are closely related to sales performance have a programmed approach to package research. Yet there are indications that firms using packaging research have 10-year sales increases double the average for most packaged goods.

New packages. Properly selected, designed and marketed, a new package almost always leads to increased sales. Packaging improvements are, historically, a sure-fire launching pad for successful promotions.

However, of the 6,000 new items seen by a supermarket buying committee each year, less than 5%, it is estimated, are accepted. Packaging is almost always critical in the acceptance or rejection of these products. The responsibility for developing acceptable packages is clearly

[7] See "How Much Research?" MODERN PACKAGING, Sept., 1958, p. 99.

It's all in the family

If your products are in a family way, you can't do better than to fit them out in high quality, color-true WS package components.

- Lead, Tin and Aluminum TUBES
- Hard and Soft PLASTIC CAPS
- Plastic Tips, Sifter Tops, All Standard FITMENTS

Talk over your requirements with your WS salesman, write direct, or phone collect to our nearest factory.

New York, N. Y.	Oxford 7-1346
Chicago, Ill.	Palisades 5-3020
Cleveland, Ohio	Academy 6-5757
Cincinnati, Ohio	Parkway 1-5736
St. Louis, Mo.	Parkview 7-7380
Los Angeles, Calif.	Pleasant 2-0791

WHEELING STAMPING CO.
WHEELING W. VA.
WSCO

Greaseproof lined board for candy, bakery or detergent cartons

Glassine lined partition stock

Polyethylene or heat seal coated boxboards

Custom decorative laminations

Custom Laminated and Coated BOXBOARD

Fine technical service

Modern production facilities

Geographic location of 3 plants makes possible excellent deliveries

18 years as suppliers to carton manufacturers

Call or write:

J. D. CAHILL CO.

Boxboard and Paper Laminators

191 Merrimack St., Haverhill, Mass. DRake 4-4797

PLANTS:

Haverhill, Mass. • Buffalo, N. Y. • Palisades Park, N. J.

"there is only one reason for designing a package . . . to sell more of a product"

PACKAGE

DESIGN

The Walter Frank Organization

ENGINEERING • DEVELOPMENT • SALES

4100 WARREN AVE. • HILLSIDE, ILLINOIS

a problem that belongs to the product manufacturer.

Among the techniques that marketers will employ in their effort to stay on top, the strategy of "convenience" will be a factor high in demand.

The cook-in-bag products will experience a new push. For example, Wilson & Co. is introducing an institutional line of some 30 "Menu-Pak" products. Seabrook Farms Co. now has 15 prepared-food items for in-pouch cookery. East Coast Marketers has introduced a line of frozen vegetables which are portion packaged in plastic-coated paper pouches. Elegante Food Products, Inc., is employing a new thermoformed high-density-polyethylene package designed for heat and serve.

With booming markets predicted by authorities in frozen, specialty and other segments of the food industry and with many new materials and packages available, the packaging-merchandising challenge in foods will be interesting to watch.

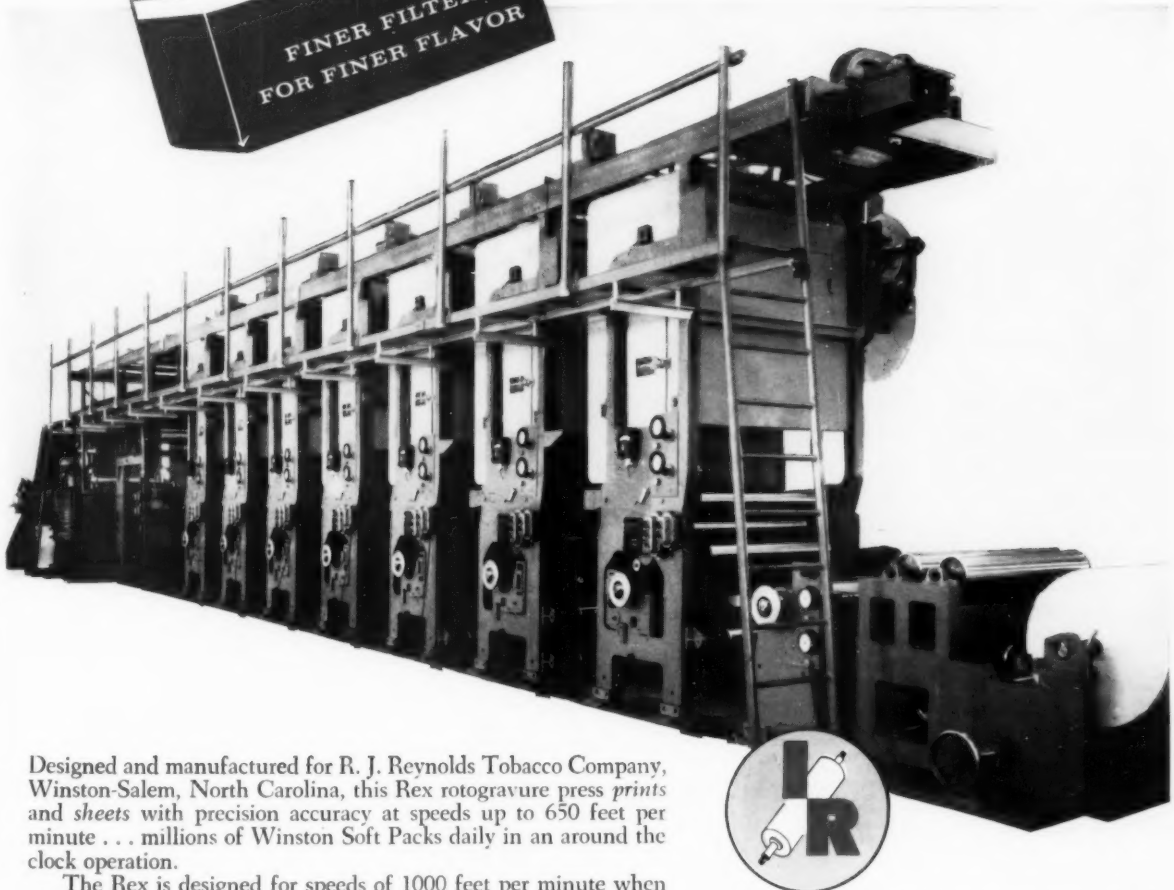
The strategy of package size will receive new emphasis this year. Portion-control, fractional and king-size packages serve customer needs with greater precision and thus afford better market penetration.

The "non-commercial look" in packaging won attention last year and will continue its gains. Its influence has been felt most in the packaging of nutritional products, specialty foods and liquors. These packages pay their way because they are basically attractive and save consumers both time and effort.

Institutional foods have discovered new advantages in upgraded packages and package designs. Such brands as Maxwell House are proving that design dollars bring dividends in the institutional field; the package can sell in this market as well as in supermarkets even though the pace and the requirements differ so much.

The strongest trends in packaging from a merchandising point of view are those that contribute to taking the work out of selling and using the product. The most successful packaging applications of 1958 stemmed from one or both of these approaches. Together with new ways of increasing production efficiency and lowering costs, they are the major packaging challenges of 1959. END

INTA-ROTO REX PRINTS MILLIONS OF WINSTON SOFT PACKS EVERY DAY



Designed and manufactured for R. J. Reynolds Tobacco Company, Winston-Salem, North Carolina, this Rex rotogravure press *prints* and *sheets* with precision accuracy at speeds up to 650 feet per minute . . . millions of Winston Soft Packs daily in an around the clock operation.

The Rex is designed for speeds of 1000 feet per minute when rewinding.

Constant tension infeed controlled by drag generator braking, electric eye controls, heavy-duty construction which assures vibrationless, almost noiseless running, and individual, fully automatic gas heaters for each station, are features of the Rex.

Fast change-overs and pre-make-ready are possible through pull out assemblies which reduce press "down time" to a minimum. Patented ink fountains with an ink circulating system are truly splash proof.

A modern press with special features to keep production flowing at top speed with top efficiency and utmost quality control is the Inta-Roto Rex.

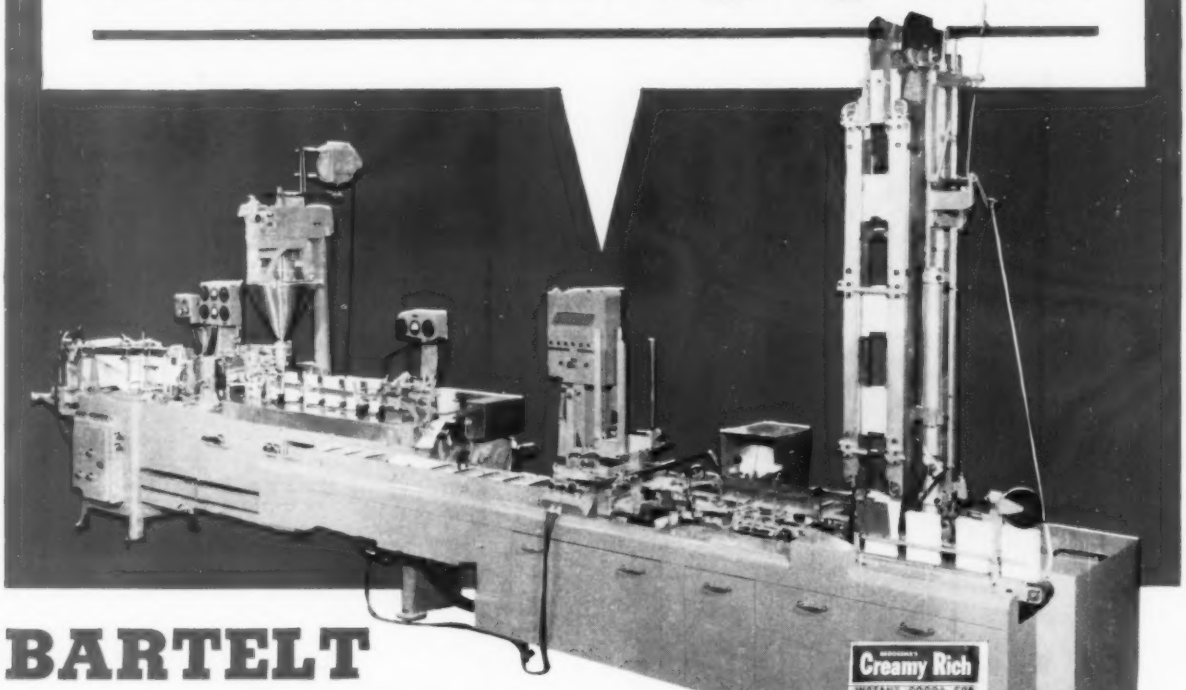
If you would like to see the Rex in action, write:

INTA-ROTO

Machine Co., Inc.

P. O. Box 454, Byrd Airport,
Richmond 3, Va.
Phone: REpublic 7-4181

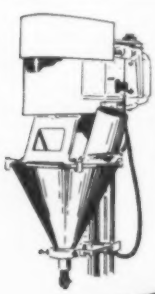
Versatile Packaging Line!



BARTELT

High Speed Automatic Packaging

Versatility is one important feature of the High Speed Bartelt Packaging Line, now in use packaging many of the best known national brands. The basic line (1) makes a bag from a roll of paper, film, or foil; (2) fills the bag accurately; (3) heat seals safely; (4) it can also set up cartons, insert the desired number of pouches and many premium items, glue and tuck ends. Bartelt also makes the Checkweigher and Filler shown below. All are fast, automatic, and designed for long years of operation with low maintenance. Write for complete information.

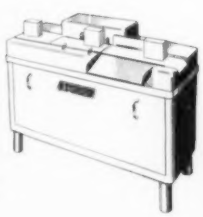


FILLER

The Bartelt Filler is a device for accurately measuring and dispensing a predetermined volume of powder, granulated solids, viscous materials, semi-liquids, or liquids.

CHECKWEIGHER

Bartelt Checkweighers are capable of handling packages up to 4½" x 7¾" base size, and cans or glass jars up to 5½" in diameter. Normal weight range is up to 2 lbs. Detects accuracy at a predetermined range of plus or minus one gram.



BARTELT ENGINEERING CO.

1900 HARRISON AVENUE
ROCKFORD, ILLINOIS
New York Office, 370 Lexington Ave.

"Machinery for Creative Packaging"

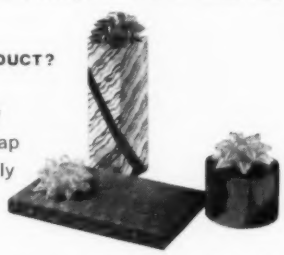
What is the "mystery machine" that ties the beautiful star bow?

WRITE 3M AND YOU'LL KNOW!

Want to dress your product for more sales next Christmas? Who doesn't? Then write 3M for a free demonstration of just-unveiled S-71 "mystery machine" that—for the first time ever—*completely* ties a finished bow! No strings to tie . . . no loops to pull out. Simply turn the handle. With production line speed and economy, the S-71 ties the beautiful star bow—all by itself. Now, as never before, pre-gift wrapping your product for an exciting new twist to Christmas merchandising is a practical reality. Start planning now to boost sales with glowing SASHEEN® Brand Ribbon or lacy DECORETTE® Brand Ribbon—and this magical new machine. Fill out and mail the coupon today.

YOUR PRODUCT?

It could be! The S-71 "mystery machine" helps you pre-gift wrap quickly, economically, beautifully to increase Christmas sales!



"SASHEEN" and "DECORETTE" are registered trademarks of the 3M Company, St. Paul 6, Minnesota. Export: 99 Park Avenue, New York. Canada: London, Ontario. © 1959 3M Co.

MINNESOTA MINING AND MANUFACTURING COMPANY
...WHERE RESEARCH IS THE KEY TO TOMORROW

WRITE TO:
Gift Wrap & Fabrics Division, 3M Company,
Dept. VO-19, St. Paul 6, Minnesota

Gentlemen:
I would like to learn the mystery of the S-71 "mystery machine". Please have your 3M salesman call and give me a free demonstration.

NAME_____

COMPANY_____

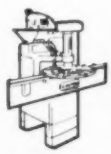
ADDRESS_____

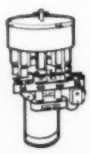
CITY_____ ZONE____ STATE_____

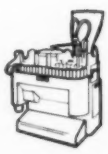
NO need to OVERFILL with COLTON LIQUID FILLERS

Patented metering cylinder and valve.
Adjustable fills, accurate to ±½%.
3 cc. to 1 qt.
4 to 480 fills per min.
Quick cleaning. Fast amortization.
Complete AEROSOL production line equipment and paste fillers.

ARTHUR
COLTON
COMPANY
3419 E. Lafayette
Detroit 7, Michigan


MULTIPLE LIQUID FILLER


ROTARY AEROSOL LIQUID FILLERS


PASTE FILLER

PROFITABLE PACKAGING

PROFITS GO UP WHEN PRODUCTION COSTS GO DOWN . . . AND COSTS GO DOWN WHEN YOU USE MODERN, EFFICIENT FRY BAG CLOSING MACHINES.

MODEL C S G
Semi-Automatic Continuous Operation . . . Easily Adjustable to Bag Height.

MODEL GS-54
Continuous Motion Bag Closer Double Folds, Glues, Heat Seals.

If the bag you use is plain paper, or if it is coated or lined on the inside, FRY Models CSG and GS-54 are the *proven* master closing machines for strong, safe, sift-proof closures. They are fast, jam-proof, precision-made and will eliminate your down-time. Send us bag and product samples and let FRY prove it to *you!*

WRITE FOR NEW, INFORMATIVE LITERATURE ON ALL FRY MODELS

GEORGE H. FRY COMPANY

42 East Second Street, Mineola, N. Y. — Pioneer 6-6230

Holloway House

[*Continued from page 101*]

aluminum pans which cuts from 5 to 7 min. off required heating time because a dull black finish absorbs heat while a shiny light one reflects it. The round pans are of 3-mil aluminum foil with a black vinyl-type lacquered coating. They are lidded with 1-mil foil by a new machine which can handle round pans.

Directions on the back of the package advise the housewife that if her package contains the black-bottom pan, she can save cooking time.

The company estimates it must pay a 25% premium for the black-bottom pan over a foil-laminated pan, but considers the advantages well worth it. Some of this extra cost is absorbed by elimination of the overwrapping on single-serving units.

The words "single serving," where applicable, are superimposed in a white circle on the product picture. Single servings are being packaged in waxed folding cartons. Larger servings are packed in solid bleach folding cartons with foil-laminated interiors and rotogravure-printed waxed overwraps. A 50% saving on the single-serving cartons due to elimination of overwraps is claimed.

Even the corrugated shipper has gotten a glamorous face lifting. Formerly plain brown kraft corrugated with black printing, the shipper now is white with the new house trademark the same red as the food carton.

The company had feared that the white shipper would soil in handling, but tests and use have shown that it holds up very well. With the acquisition of its Lafayette plant, Holloway House now has ample warehouse space and can purchase in much larger quantities, thus allowing economies which all but offset the premium cost of white corrugated.

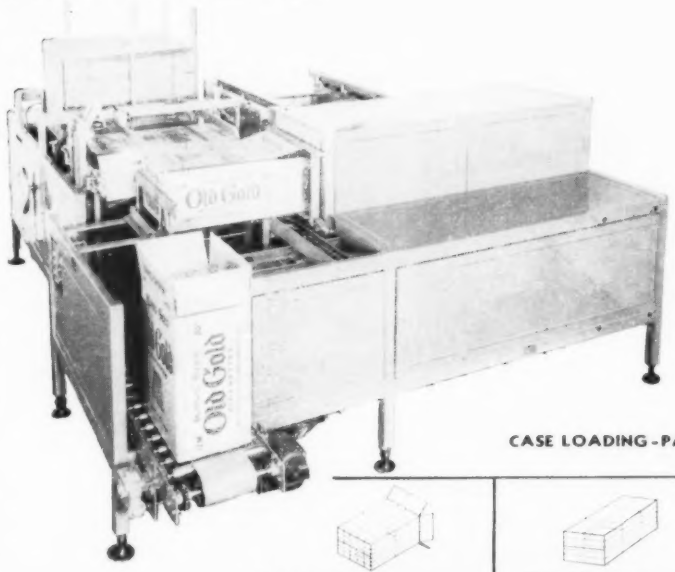
The shipper's tear tape, when pulled, divides the box into equal halves. The closing corner is stapled. It is sealed top and bottom with white kraft gummed tape. Die-cut holes in the shipper provide for fast freezing (Holloway House fills, seals, packs—*then* freezes). Both package sizes are packed 12 per shipper.

Holloway House's new packaging program is getting follow-through promotion. All advertising plays up the little red house trademark and radio commercials parody the old song "Black Bottom." END

Which Packomatic solves your production line problem?

T.M. Reg. U. S. Pat. Off.

PACKOMATIC Feeder - Former - Positioner - Upender



Require a fully automatic case loader?

Here's a fully automatic case Feeder-Former-Positioner-Loader that is breaking records on actual production line conditions in a variety of industries. And by end-loading techniques, savings on paper board alone run as high as 28%. Production jumps dramatically with this high-speed, continuous-motion machine. Labor costs are lower, too, because except for hand-stacking corrugated shipping containers in flat form into the magazine, everything's automatic. Below are some of the end-loading patterns showing number and packing of cartons. Check with Packomatic engineers if your loading pattern does not appear here. Custom-engineering will produce a Packomatic for your product.

CASE LOADING-PATTERNS:

Twenty-four cartons in 12½" x 10⅝" x 8½" case

Eighteen 7 & 8 oz. cartons in 20" x 14⅞" x 8⅝" case

Sixty cigarette cartons
King Size: 17⅞" x 11½" x 22"
Regular: 14 13/16" x 11½" x 22"

Thirty 1 lb. cartons in 16⅛" x 10 5/16" x 7¼" case

Twenty-four cartons in 19½" x 10⅞" x 7" case

Forty-eight cartons in 22¾" x 23½" x 15⅞" case

PACKOMATIC
Fully-Automatic Case Loader

Want a high speed can line?

Keep pace with your production line. Now, feed-form-position-load and seal your corrugated shipping containers at high-speeds—up to 720 cans a minute—automatically. This is accomplished with a smooth continuous motion to eliminate jarring and bumping of cans that causes leakers and mars labels or lithographing. Machines in successful operation across the nation, (Packomatic was *first* with a successful production-line machine) end-load a variety of can sizes —from six 5-quart cans to twenty-four 12-oz. cans—in such patterns shown at left. End-loading reduces paper board costs. Automation saves labor costs. From corrugated flats to sealed containers, only one part-time attendant is required. Consider this time-money saver for your plant. We can custom-engineer a machine like this for you.

CASE LOADING-PATTERNS:

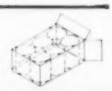
handles any can from the 12 oz. to the 5-qt. Imperial

Six 5-qt. cans or gallon cans in 20⅛" x 13⅝" x 9⅛" case and 20¼" x 13¾" x 8¼" case

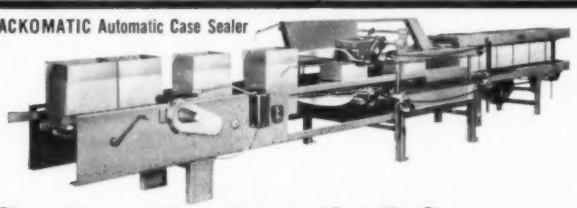
Twelve 46 oz. cans in 21" x 13" x 7⅛" case

Twenty four 12 oz. cans in 16⅜" x 10 15/16" x 5 3/16" case

Six No. 10 cans in 22 1/16" x 17⅜" x 7⅛" case

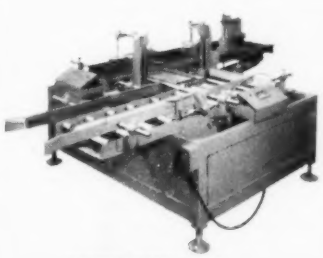


PACKOMATIC Automatic Case Sealer



Like to seal automatically?

Here's the machine for you — the **first** fully automatic case sealer proven under actual production line conditions. No operator needed to align corrugated cases, open flaps, glue, seal and discharge ready for shipment. Adjustable to a wide range of case sizes. Similar models, available semi-automatic.



PACKOMATIC 4-Side Case Imprinter with serial numbering device.

Need 4-Side Imprinting

Prints either or both sides and ends of corrugated shipping containers with name and contents — in addition to imprinting a serial number. Very essential if using modern palletizing methods. The only machine of its kind. Other regular models available for minimum case imprinting requirements. Write for specs and prices.

J. L. FERGUSON COMPANY . Joliet 3, Illinois

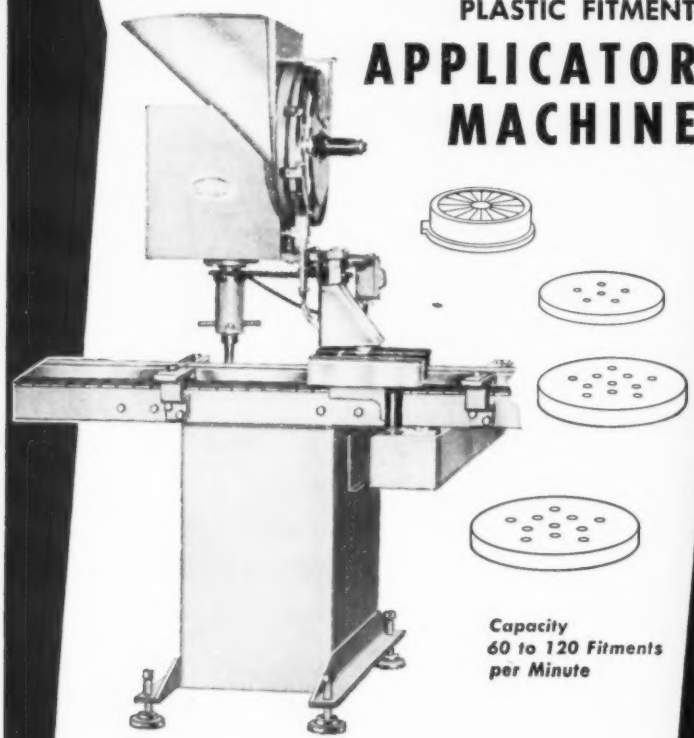
NEW YORK, CHICAGO, CLEVELAND, BOSTON, TAMPA, BALTIMORE, PORTLAND, DENVER, LOS ANGELES, SAN FRANCISCO, SEATTLE, NEW ORLEANS, LOUISVILLE, KANSAS CITY AND ALL PRINCIPAL CANADIAN CITIES.

Tops them all

• A MODEL FOR EVERY PURPOSE
• A SPEED FOR EVERY NEED

RESINA
CAPPERS

PLASTIC FITMENT
APPLICATOR
MACHINE



Capacity
60 to 120 Fitments
per Minute

Operates with or without Screw Capper. Selects and applies varied sizes . . . also solid type fitments conventional in drug and pharmaceutical packaging. Remarkably simple and efficient to operate . . . at low, LOW maintenance cost.

AND SPECIAL MACHINERY
Descriptive Literature on Request

RESINA
AUTOMATIC MACHINERY CO., INC.
572 Smith Street Brooklyn 31, N. Y.
Agents in Principal Cities throughout United States and Canada.

PDC honors Nabisco

The first annual industry award of the Package Designers Council "for outstanding contribution to the use

Harry Schroeter (center) accepts award from Karl Fink. At right, Roy Larsen.

of creative package design in marketing" was presented to the National Biscuit Co. at a dinner meeting held recently in New York.

The 1958 trophy, given to Nabisco "in recognition of its consistently good packaging and of the effective working relationship established between the company and its design consultants, Raymond Loewy Associates," was presented by Karl Fink, FPDC, president of the Package Designers Council. It was accepted for Nabisco by Harry Schroeter, the company's director of advertising.

Following the presentation, representatives from Nabisco and Raymond Loewy Associates showed how they work together to develop Nabisco's packaging program.

Mr. Schroeter stressed the importance of packaging in top management decisions. Neal Hathaway, director of marketing for Raymond Loewy Associates, presented slides to illustrate Nabisco's continuing packaging development program. Walter Stern, PDC, technical director of packaging and graphics for Raymond Loewy Associates, introduced the Loewy team which works with Nabisco: William T. Snaith, managing partner of the firm; Roy Larsen, PDC, director of the packaging and graphics division; Howard Treu, assistant to Mr. Larsen; Walter Von Scheven, senior designer, and Mr. Hathaway.

Attending the dinner were 115 designers, manufacturers of consumer goods and package suppliers. The trophy, a metal cube imbedded in a pyramid of transparent acrylic plastic, was designed by Margery Markley, PDC, secretary of the Council and chairman of its public relations committee. END

NEW AND BRILLIANT FROM IPI

FAST SETTING QUICK DRYING Speed King CARTON INKS

FOR LETTERPRESS AND OFFSET

The quick set, fast dry and high gloss of IPI's revolutionary Speed King inks for general commercial use are now available to package printers!

Speed King Carton inks set so fast—even on patent coated boards—that offset rarely is a problem. This means higher press loads without racking, less handling, and considerably less spray than needed for conventional gloss carton inks.

Speed King's gloss on clay coated and on cast coated stocks such as LUSTERKOTE, KROMEKOTE, ULTRA-GLOSS, etc., rivals that of the finest gloss carton ink. And because it's a more *uniform* gloss, even lower cost stocks print better!

Speed King's split-second set and amazing dry (as little as 2 hours) mean faster processing of the printed board—with obvious advantages to the carton printer.

Speed King is stable on the press; halftones don't muddy up, small type stays open.

These wonderful new inks—both letterpress and offset—are now available from your nearest IPI branch, in a wide range of popular carton colors.

Try them on a really tough job—and see the definite difference!

IPI, IC and Speed King are trademarks of Interchemical Corporation

ipi

INTERCHEMICAL • PRINTING INK
CORPORATION DIVISION

EXECUTIVE OFFICES: 67 WEST 44th STREET, NEW YORK 36, N. Y.

U.S.I. POLYETHYLENE NEWS

A series for plastics and packaging executives by the makers of PETROTHENE® polyethylene resins

JANUARY, 1958 U.S. INDUSTRIAL CHEMICALS CO., DIVISION OF NATIONAL DISTILLERS AND CHEMICAL CORP., 99 PARK AVE., N. Y. 16, N. Y.

Packaging Notes

Poly Cap for Lighter Fluid and Household Oil Cans features a valve spout that moves on an undercut track. The undercut design gives a tight seal which prevents both leakage and evaporation loss. The cap, which was developed after two years of testing, takes advantage of polyethylene's tendency to swell in contact with lighter fluid. The undercut valve component and undercut cap base both are designed to effect a tighter seal when swelling occurs. The caps are press-fitted to the cans with conventional polyethylene press-fit machinery.

Polyethylene gloves, strong enough to be reusable and inexpensive enough to be disposable, are now being marketed for both home and industrial use. The gloves are made of 1.75 mil polyethylene. Although strong, they do not impair the sense of touch as do gloves of other materials. They are presently being packaged in pocket packs of four and in economy rolls with up to 144 gloves on a roll. They are available in heavier gauges for industrial applications. The gloves reportedly have been cleared for use with radioactive materials by a leading radiation laboratory.

Gloves of 1.75 mil polyethylene are being packaged in economy rolls of up to 144 per roll and are available in heavier gauges for industrial applications.

"Woven" Polyethylene Bags for packaging citrus fruits and other produce may make their appearance soon. Poly strands are laid at intervals of about ⅜ths of an inch, then are heat-sealed to similar strands laid across them. The effect is an open, latticed material which has considerable strength. Decorative effects are obtained with strands of different colors.

Poly bag with two compartments separated by a simple polyethylene check valve permits dry premixes to be packaged in ready-to-use form. User simply adds liquid to upper compartment, squeezes it into premix compartment, then wet mixes the ingredients by kneading the bag. Check valve prevents leakage of contents. Products for which the newly patented package design is suggested include cake, pie crust and bread mixes, other wettable formulations such as glues, cements and plaster.

U.S.I. Holds Polyethylene Conference For Export Agents from Around the World

Discuss Latest Technical Developments, Growing Overseas Markets

Export agents representing 20 overseas markets were the guests of U.S.I. at a seven-day conference that included meetings in New York, Tuscola, Ill., and Chicago. Purpose of the conference was to review the latest developments in polyethylene technology and to discuss the rapidly growing markets for polyethylene abroad.

Export agents from 20 countries disembark from plane prior to visiting U.S.I. plant at Tuscola, Ill. for first-hand view of polyethylene resin production.

The 24 visitors represented markets which accounted for almost 75 percent of total U. S. polyethylene exports during the first six months of 1958. Represented were most of the European countries, South and Central America, the Far East, Near East and Mexico. Last year, U. S. polyethylene sales in these areas ran some 20% ahead of 1957, and further increases have been predicted.

After sales orientation meetings in New York, the conferees visited the giant petrochemical complex at Tuscola, where U.S.I. makes its PETROTHENE® polyethylene resins. U.S.I. research and production experts gave a series of lectures designed to bring the overseas visitors up to date on the latest developments in polyethylene resin production and processing.

The visitors moved on to Chicago for additional meetings and a press reception with editors of leading American plastics publications. The export representatives stayed on in Chicago to attend the National Plastics Exposition and the International Dinner of the Society of the Plastics Industry.

Poly Film Packaging Cuts Weight Losses in Peaches

Preliminary research conducted at a leading midwest agricultural experiment station indicates that prepackaging peaches in polyethylene film can cut weight losses in peaches which must be shipped over long distances.

In the tests, peaches were placed in plastic trays and overwrapped with perforated poly film. Weight losses during cold storage were reduced by 60%. Surface shriveling and dullness, usually encountered in bulk handling, were found to be eliminated in peaches which were packaged in film.

A controlled ripening schedule, in which the packaged peaches were ripened after a week in cold storage, was found to improve quality and reduce incidence of storage rots.

Borated Polyethylene: Order 6-8 Weeks in Advance of Use

Users of borated polyethylene are advised to schedule their orders six to eight weeks in advance of their projected use dates. The compounded resin picks up moisture from the air and must therefore be used within a short time after preparation. The six to eight week lead time on orders enables U.S.I. to schedule production for this specialized grade and insures delivery as close as possible to actual use date.

New Press Permits Printing Poly Film in Continuous Roll

A new printing press has been developed which enables polyethylene film to be printed in two colors at high speed without the need for stopping or reducing speed to join rolls.

Each reel stand of the new flexographic press carries two film reels, each independently driven. By synchronizing the speed of the full reel with the empty reel, the press permits a pasted joint to be made with no interruption or slow-down.

Speed of the press is said to be more than 450 feet per minute. The press is equipped with unit driers, a rotating mirror and web scanning device, static eliminator tension control and automatic paster on both unwind and rewind ends. The press will print two colors, with two more colors possible through the attachment of another unit

Famous
for Flint

Famous
for Blue

NOW

AMBER MARYLAND GLASS

Designing, creating and manufacturing glass packages that sell is nothing new for Maryland Glass. We've done it successfully for years. Famous Maryland Blue bottles and jars have stopped the eye . . . and started the sale for dozens of products; the quality designs and distinctive shapes that Maryland has created in crystal clear Flint Glass have long been a byword with men who recognize that a well dressed package is the best introduction for a quality product.

Now there is something NEW at Maryland Glass. The same imagination in design, the same service and experience are available to you in eye stopping AMBER GLASS.

If you have a design problem or a packaging need . . . IN BLUE, FLINT, OR AMBER get in touch with MARYLAND GLASS CORP., 2147-53 Wicomico St., Baltimore 30, Md.

Classified Advertisements

Employment
Business Opportunities
Used or Resale Equipment

Machinery and Equipment For Sale

FOR SALE—Bartelt Packaging Machine complete with mateer auger filler, magic-eye, vacuum pump, 3" bag clamps. Excellent condition. Machine in operation. Reasonable price, available for immediate delivery. Reply Box 997, Modern Packaging.

TAMPON MACHINERY—Due to client's death we can sell a line of unused Tampon machinery which we have designed and built but not yet delivered. It produces an improved product. Great potential. Tampon sales doubled between 1948-1954. Suited for firms selling to drug houses, supermarkets and department stores. Brochure on request. Ketchel Eng'n'g Co., 1401 Palisade Avenue, West Englewood, N.J., TE-4076.

FOR SALE—Lynch Morpac Wrapping Machine—Model E Completely automatic—Will wrap packages $7\frac{1}{2}$x5x$3\frac{3}{4}$ to 15x10x5 at high speed. Printing attachment included. This machine in excellent condition. Priced for quick sale. General Offset Printing Co., Inc., 157 Chestnut Street, Springfield, Mass.

FOR SALE—4-color Flexograph Press. Roll to roll with auto. splice and tension control. Max. Web 34", design to repeat min. 9", max. 27", gas hot air drying between cyls. and overhead. Will print cellophane, foil, polyethylene and paper. Hal Billig, Mount Morris, Illinois.

FOR SALE—Heat seal pouch type bag equipment for making barrier bags, cello poly pouches. Simplex 7-24, 7-15, 8-7 and 10. Also Simplex 1 & 4 for cellophane bags. Potdevin 291 and 293 with two-color printer. Tin Tie machine and 60" waxer. 60" creping machine. Contact Mr. Scher, Melrose Packaging Corp., 61-48 Fresh Meadow Lane, Flushing 65, N.Y. LEnox 9-1550.

MOST MODERN PACKAGING and Food Processing Machinery at wonderfully low prices. 1—Pneumatic Scale Automatic Carton Feeder, bottom sealer and top sealing units with interconnecting conveyors. Pneumatic Scale Tite Wrap Machine. Jones Model CMV highly flexible Automatic Cartoner. 2—Package Machinery Model C Transwraps, with net weight scales, bulk and dribble feeds, electric eyes. Installed new in 1955. Stokes & Smith Model BS Stokeswrap, auger feed, electric eyes. Scandia Model SFS6F high speed automatic wrappers with electric eyes. Ceco Model 40-$9\frac{1}{2}$ TT and Model 40-18 Glue Seal Automatic Adjustable Cartoning Machines. Hayssen Wrappers, all sizes. Package Machinery Models FA, FA2, FA3 and FA4 Wrappers with and without Electric eye. 1—FA2 Wrapper complete with electric eye and tear tape unit. In like new condition, used for samples only. 2—Package Machinery Model PA (Palmer) Machines—Several with rotary feeds. Wrap King Model DW and Model DW2 Wrappers with or without cardboard feed and labeling attachments. Ceco Model A3901-12 Cartoning Machines with compression unit. Complete details and prices available on request. Union Standard Equipment Company, 318 Lafayette Street, New York 12, N. Y. Phone: CAnal 6-5334.

Machinery Wanted

WANTED—Used Extruder—Heavy duty also Flexograpic press 47" web, 32" to 40" repeat. Reply Box 1001, Modern Packaging.

Materials For Sale

POUCH STOCK—Approximately 1,700 lbs. Dobeckmun-manufactured polyethylene, 3 mils, extruded on 25-lb. pouch stock; 9" width, 3" i.d., 13" o.d. rolls. Perfect condition. Sell at sacrifice. Reply Box 994, Modern Packaging.

Help Wanted

SALES SERVICE—SALES CORRESPONDENT—AAA-1 multi-plant flexible packaging converter has excellent opportunity for capable man. Experience flexible packaging or related field necessary. Must have ability to supervise and make decisions. Submit resume, salary requirements to Personnel Dept., Onieda Paper Products, Inc., 10 Clifton Boulevard, Clifton, New Jersey.

REPRESENTATIVES WANTED—Leading extruder of polyethylene film in Metropolitan area now has openings for qualified men to sell polyethylene tubing to converters. Commission basis. Prefer men with flexible packaging experience now residing in Maine, New Hampshire, Vermont, Massachusetts, Pennsylvania, Ohio, Illinois, Michigan, etc. Give full details in letter. All replies will be held confidential. Write—Sales Manager, Globe extruders, 57 Meserole Ave., Brooklyn 22, N.Y.

EXCELLENT OPPORTUNITY—Salesman wanted for West Coast area by nationally known Packaging Machine Company. Salary or commission. Send resume. Reply Box 1004, Modern Packaging.

DISTRIBUTORS WANTED—Aggressive well-known manufacturer requires additional distributors to follow sales leads and distribute machinery for new, inexpensive, patented visual display package. Excellent opportunity. Please write for details. Reply Box 993, Modern Packaging.

MANUFACTURERS REPRESENTATIVE—Wanted for East Coast area to represent well established manufacturer of Biological, Pharmaceutical and Specialty molded rubber goods. Send resume to Box 1003, Modern Packaging. All replies will be held in strict confidence.

PACKAGING PERSONNEL
Positions Filled and Secured. A Confidential Nationwide Service for employers seeking personnel and individuals seeking new positions. Inquiries invited. Reply to Graphic Arts Employment Service, Est. 1952. Helen M. Winters, Manager: Dept. PAC-1, 307 East 4th Street, Cincinnati 2, Ohio. Phone CHerry 1-2202.

FLEXIBLE PACKAGING SALESMAN—Eastern Converter of extrusion-laminations, Cellophane/Poly, Mylar/Poly, Paper/Poly, Foil Poly, printed and plain roll stock, Pouches, has opening in Pittsburgh Youngstown area for commission salesman. No draw, will turn over present accounts. Reply Box 992, Modern Packaging.

MANUFACTURERS REPRESENTATIVES WANTED—New blood needed . . . openings available in important areas to sell complete fast-moving line of packaging machinery . . . excellent opportunity for experienced man . . . state experience, education, lines carried, territory covered. Reply Box 1000, Modern Packaging.

PACKAGE ENGINEER—Career opportunity with large, national retail organization. Need topnotch man with potential for future growth and development. Training in engineering or physics desirable. Five to eight years' experience in packaging required with specialized knowledge of packaging machinery, manufacturing methods, materials and specifications, with emphasis on package utility, cost reduction and appearance. Must be able to set up and evaluate test data. Need sense of merchandising, ability to recommend new packages and package improvements. Ability to work with and sell ideas to middle and top-management men important. Salary $8,000-$10,000. Reply Box 996, Modern Packaging.

SALES MANAGER—Well established Filling Machinery Company has immediate opening for national sales-sales management position. Excellent opportunity. Replies completely confidential. Reply Box 1002, Modern Packaging.

SALESMAN WANTED—in all territories for novel molded plastic box sideline. A small line of outstanding merit, competitively priced now going into production. Give pertinent information in first letter. Reply Box 999, Modern Packaging.

MFG'S REPRESENTATIVE—To handle liquid vacuum fillers and other packaging equipment. Openings in all major cities. Prefer agent with allied lines. Reply Box 991, Modern Packaging.

Business Opportunities

CELLOPHANE AND PAPER CONVERTERS in South America with ample sales orders and excellent outlook, but short of working capital looking for association with reliable company or individual. Country with low tax income bracket and booming. Reply Box 995, Modern Packaging.

WANTED—Leading Flexible Packaging Converter is interested in acquiring additional facilities for printing and manufacturing polyethylene, cellophane and paper bags. Also would be interested in obtaining additional facilities to extrude and laminate cellophane to polyethylene. Reply Box 998, Modern Packaging.

Miscellaneous

EUROPEAN MANUFACTURER of quality self-adhesive tapes e.g. cellulose and vinyl wants to contact companies all over the world interested in selling tapes. Special wishes re lengths, widths and put-up are attended to. Manufacturing licenses are also available in some countries. Box 972, Modern Packaging.

ALL CLASSIFIED ADVERTISEMENTS PAYABLE IN ADVANCE OF PUBLICATION
Closing date: 26th of second preceding month, e.g., January 26th for March issue.
Per inch (or fraction) ..... $30.00. Each 3 inches or fraction (boxed) $15.00 extra.
Situation Wanted ads ..... 1/3 of above rates.
For purposes of establishing rate, figure approximately 50-55 words per inch.
Address all communications to Classified Advertising Department,
Modern Packaging, 575 Madison Avenue, N. Y. 22, N. Y.
Modern Packaging reserves the right to accept, reject or censor classified copy.

* OUTSTANDING OPPORTUNITY

ADHESIVE CHEMISTS

*

Openings available in laboratories of established industrial concern which is expanding the degree and scope of its adhesive development program. Men required with limited or extensive experience in formulation or practical application of industrial adhesives. Knowledge of use of synthetic resins in emulsion, solvent, or hot melt applications of particular interest.

In joining our company you become part of a team that is geared to the future—we are a growing company with products for virtually every segment of industry—and we are small enough to quickly reward individual initiative and ability. Our employees know of this advertisement.

Salary open. Liberal employee benefits. New York area location. Write in detail outlining experience. Replies will be kept in strict confidence.

Box 990, Modern Packaging.

PACKAGING ENGINEER

We have an opening for a packaging engineer or equivalent with pharmaceutical background—to serve as nucleous for a creative packaging group to be formed in connection with the Applied Research Laboratories.

We are looking for a man with experience in modern pharmaceutical dosage forms including aerosol containers, plastic containers, disposable syringes, unique sampling presentation, etc. A real opportunity for a man with imagination, creative & design ability.

Please give details about your education & experience in your letter to:

Director of Personnel

HOFFMANN-LA ROCHE, INC.
Nutley 10, NJ

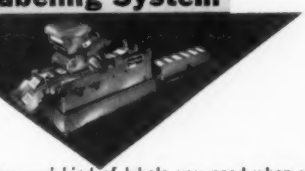
REDUCE

LABEL INVENTORIES DRASTICALLY

WITH

KIMBALL ROTO KIMCO

Automatic Labeling System



- Prints exact number and kind of labels you need when you need them!
- Savings in label reordering and inventory alone will more than justify cost of KIMCO System.
- Imprints all kinds of pre-pack labels, bag tops, box-end labels, tags and tickets—at rate of 150 per minute.
- Stops costly rubber stamp and hand-marking operations.
- Reproduces on all types of paper stock—gummed, ungummed, heat-seal, pressure-sensitive, as well as heavy tag board. From 1 to 23 lines of copy—small to large type.
- Faster. • Cleaner. • Inexpensive. • Small, compact, portable.

MAIL COUPON TODAY!

Since KIMBALL 1876

A. KIMBALL COMPANY, Rewe Street, Brooklyn 11, N. Y. Dept. PM
Offices in Principal Cities in U.S.A. and Canada
A. KIMBALL, LTD., 85 Advance Road, Toronto 18, Canada

☐ Please send literature.
☐ Please arrange demonstration.

Name_____
Company_____
Address_____

Index to Advertisers

January 1959

Distribution of this issue: 32,250

45 Air Reduction, Inc.
9 American Can Company
112 American Flange & Manufacturing Co. Inc.
139 Amsco Packaging Machinery, Inc.
19 Arabol Mfg. Co., The
144 Arenco Machine Co., Inc.
6 Armstrong Cork Co., Glass and Closure Division
163 Artcote Papers Inc.

182 Bartelt Engineering Co.
54 Bernardin Bottle Cap Company, Inc.
138 Black-Clawson Company, The, Dilts Div.
16 Brockway Glass Company, Inc.
62 Brown Company
111 Burt, F. N., Company, Inc.

139 Cady, E. J., & Company
180 Cahill, J. D., Co.
156 Celanese Corporation of America, Plastics Division
17 Cellu-Craft Products Corporation
125 Champlain Company, Inc.
194 Chicago Molded Products Corp., Campco Division
158 Claremont Flock Corporation
190 Classified
149 Cleveland Container Company, The
184 Colton, Arthur, Company
48 Conapac Corporation, Roto-Wrap Machine Corp. Div.
150 Consolidated Packaging Machinery Corp.
Back Cover Continental Can Company
143 Crocker, H. S., Co., Inc.
7 Crown Cork & Seal Company, Inc., Crown and Closure Division

167 Darling & Company, Glue Division
15 Davis, Joseph, Plastics Co.
145, 146 De Jur-Amsco Corporation
140 Diamond Chain Company, Inc.
68 Diamond Gardner Corporation
165 Dillon-Beck Manufacturing Co.
5 Dobeckmun Company, The, a Division of the Dow Chemical Company
51 Doughboy Industries, Inc., The Mechanical Division
141 Dow Corning Corporation
du Pont de Nemours, E. I., & Co. (Inc.)
52, 53 Film Dept., Cellophane
34, 35 Polychemicals Dept., Alathon

32 Ekco-Alcoa Containers Inc.
61 Extruded Plastics, Inc.

172 Faustel Engineering, Inc.
185 Ferguson, J. L., Company
41 Fisher's Foils Limited
162 Flint Ink Corporation
Food Machinery and Chemical Corporation
66 Canning Machinery Division
33 Packaging Machinery Division, Hudson Sharp Plant
180 Frank, Walter, Organization, The
184 Fry, George H., Company
42 Fuller, H. B., Co.

171 General Corrugated Machinery Co., Inc.
131 General Printing Ink Company, Division of Sun Chemical Company
137 Gilman Paper Company
1 Goodyear Tire & Rubber Co., The, Packaging Films Dept.

56A Hamac Packmaschinen GMBH
59 Hayssen Manufacturing Company
153 Heinrich, H. H., Co.
25-28 Hinde & Dauch, Division of West Virginia Pulp and Paper Co.
31 Hoerner Boxes, Inc.
191 Hoffman-LaRoche Inc.
33 Hudson-Sharp Plant, a Subsidiary of FMC Packaging Machinery Div.

171 Industrial Marking Equipment Company, Inc.
140 Injection Molders Supply Company
181 Inta-Roto Machine Co., Inc.
Interchemical Corporation
177 Finishes Division
187 Printing Ink Division
153 Island Equipment Corp.

147 Jones, R. A., & Company, Inc.

166 Keystone Packaging Service
133 Kidder Press Co., Inc.
191 Kimball, A., Co.
109 Knox Glass, Inc.
Koppers Company, Inc.
168, 169, 20-23 Plastics Division

139 Labels & Decals, Inc.
151 Lynch Corporation

161 Manhasset Machine Co., Inc.
174 Markem Machine Co.
189 Maryland Glass Corp.
Inside Back Cover Michigan Carton Co.
183 Minnesota Mining and Manufacturing Co., Gift Wrap and Fabrics Div.

70 Nashua Corporation
47 National Laboratories and Mfg. Corp.
Inside Front Cover National Starch Products Inc.
30 New Era Manufacturing Co.
117 New Jersey Machine Corporation
161 Niemand Industries

98, 99 Owens-Illinois

123 Package Machinery Company
129 Paramount Packaging Corp.
60 Paramount Paper Products Co.
65 Peerless Tube Company
153 Peter Partition Corp.
171 Peters Machinery Company

157 Plastic Artisans, Inc.
43 Pneumatic Scale Corp., Ltd.
160 Potdevin Machine Co.
158, 159 Power-Curve Conveyor Co.

4 Redington, F. B., Co.
136 Resina Automatic Machinery Co., Inc.
12, 13 Reynolds Metals Company
8 Riegel Paper Corporation
170 Risdon Manufacturing Company, The
18 Roto-Wrap Machine Corp. Division, Conapac Corporation
10 Rowell, E. N., Co., Inc.

55, 56 St. Regis Paper Company
49 Seaboard Lithograph Corp.
142 Seal Spout Corp.
173 Sheffield Tube Corporation, The
18 Sinclair and Valentine Co.
166 Soag Machinery Company, The
46 Spencer Chemical Co.
63 Steigerwald, A. M., Co.
131 Sun Chemical Corp., General Printing Ink Company, a Division

193 Taber Instrument Corporation
24 Tele-Sonic Packaging Corporation
11 Thatcher Glass Manufacturing Company, Inc.
112 Tri-Sure Products Ltd.

Union Carbide Corporation
164A-D Union Carbide International Company
67 Union Carbide Plastics Company
127 Visking Company Division
154 U. S. Automatic Box Machinery Co., Inc.
188 U. S. Industrial Chemicals Co.

155 Venesta Limited, Foil Div.
161 Verner, B., & Co., Inc.
127 Visking Company, Division of Union Carbide Corporation
36 Vitra-Tone Engraving Corp.

166 West Engineering Co., Inc.
West Virginia Pulp and Paper Co.
38, 39 Bleached Board Division
134, 135 Kraft Division
25-28 Hinde & Dauch
179 Wheeling Stamping Co.
158 Wilsolite Corp.
157 Wrap-Ade Machine Co., Inc.
29 Wright Machinery Company, Division of Sperry Rand Corporation

44 Youngstown Sheet and Tube Company, The

MODERN PACKAGING

A BRESKIN Publication

Published by Modern Packaging Corp., 575 Madison Avenue, New York 22, N.Y.

Make it a habit... a helpful habit!

Join the many readers of MODERN PACKAGING who check through its Manufacturers' Literature Page each month for "capsule" reviews of significant literature available without charge from suppliers to the field. Use it as a handy way to order current information for your files on packaging materials, equipment, supplies, and specialized services.

Here are typical offerings, excerpted at random from the current issue.

PLASTIC SQUEEZE BOTTLES. 12-page illustrated brochure describes this California company's facilities for the manufacture of plastic squeeze bottles, together with caps and fitments. Company also makes one-piece polyethylene vial with attached cap. Olympic Plastics Co., Inc.

SLIDE PACKAGE FORMER, BLISTER SEALERS. 4-page illustrated brochure describes a blister package sealer, a turn-table blister sealer, a junior blister sealer; and a slide package former that produces a flange fold or folds, and packages slide card and product in one operation. Tronomatic Machine & Mfg. Corp.

GLASSINE & GREASEPROOF PAPERS. 4-page illustrated brochure describes the features of this company's glassine and greaseproof papers as carton liners and dividers, package overwraps, canister and fiber tube laminations, candy and cookie cups, retail food service wraps, etc. Rhinelander Paper Co.

PACKAGING EQUIPMENT. 8-page catalog lists available screw cappers, tube fillers, piston fillers, gluers and sealers, labellers and related equipment available for purchase from this company. First Machinery Corp.

FLEXOGRAPHIC AND ROTOGRAVURE PRESSES. 4-page illustrated brochure describes miniature to 40-in. presses that print on paper, foil, cellophane, polyethylene and other films in single or multi-color operation up to four colors. Helix Machine Co., Inc.

AEROSOL PACKAGING EQUIPMENT. Illustrated 4-page booklet gives features of an aerosol pressure charging unit; an automatic, 2-stream filling machine; a rotary pressure vacuum filler; a compressed air bottle cleaner; and other aerosol packaging machinery. The Karl Kiefer Machine Co.

The Page is easy to find—it's printed on heavy paper stock. And it's easy to order from too—a postpaid order form is attached to it. Turn to it now—on page 175.

It's helpful . . . It's free. Use it every month!

MODERN PACKAGING

A BRESKIN PUBLICATION

575 Madison Avenue

New York 22, New York

Taber®

SHEET PLASTIC FABRICATING MACHINES

Save you money!

BEAD 2 EDGES AT ONCE

DUAL-EDGE BEADER

Simultaneously beads both edges of plastic sheet, roll, die cut blanks and strips, .005" to .020" thickness, 2" to 20" wide. Nine different beads and Specials! High speed production! 500" to 1,000" per MINUTE. Each head can be used independently as a single edge beader if desired.

700 FOLDS PER HOUR

FOLDER-CREASER

This dual-purpose 30" sheet plastic fabricator gives you the advantages of TWO machines at ONE price. The Folder-Creaser handles sheets .003" to .020". Folds minimum of 700 per hour at 180° and "instant creases" 90° angles at minimum of 1200 per hour without rejects, tearing or opening up.

FASTER BLISTER PACKAGING

BLISTER-EDGE FOLDER

Performs 180° edge folds at rate of 600 to 1200 folds per hour on blister packages made from thermoplastic sheet from .003" to .020" in thickness. Heated 18" blade actually molds sheet into desired fold to accommodate slide-in cardboard bottom. No tearing or opening up.

WRITE FOR LITERATURE *describing folding, creasing, beading, drawing and forming machines.*

TABER INSTRUMENT CORPORATION

111 GOUNDRY STREET Section 12

NORTH TONAWANDA, NEW YORK

Telephone: LUdlow 2626 TWX - TON 277

This attractive seed-starter kit, which retails at an economical 49¢, needs only to have holes punched and water added for germinating the seeds. Lid made from Campco stress-free acetate and base from Campco S-300.

Perfect pack for the product ...with low-cost CAMPCO sheet

Low production cost is the big requirement for this Northrup-King Punch'n Gro pack. Yet other requirements are equally stringent. The hole recesses must be easy to punch out, but not so weak that they will rupture in shipment. The lid also should have high optical clarity, yet cannot shatter or crack during shaping. The base, too, needs to have high impact resistance, even in sections thinned for economy.

Here's how Campco know-how and materials met the requirements:

1. CAMPCO acetate provided the crystal clarity needed in the lid. Its special non-blushing formulation eliminates all clouding and discoloration.

2. To achieve high impact strength in the base, CAMPCO provides rubber-modified polystyrene sheets (.015" gauge) which are vacuum-formed to make the base—permitting a much thinner gauge than injection-molding, since it eliminates internal stresses. In the lid, this permits using .010" gauge acetate—necessary for punching of clean holes—because fragility is eliminated.

3. To meet the required production cost, CAMPCO worked closely with Mankato Paper Box Company, the package manufacturer—providing technical assistance which aided Mankato in producing the Punch'n Gro seed pack economically.

Here's how Campco can help you

CAMPCO's complete line of thermoplastic sheet and film fulfills all of your requirements—acetate, butyrate, rigid and flexible polyethylene, rubber modified styrene and copolymer styrene (A.B.S.) and nylon. Also CAMPCO's Registrite which is made especially for applications where high-quality printing and registration are required. CAMPCO can suggest design methods—to take advantage of economical stock rolls and sheets—and also suggest sources of fabrication in your area. All CAMPCO sheets are available in a wide variety of sizes, gauges and colors. For complete details, write today:

CAMPCO *sheet and film*

a division of **Chicago Molded Products Corp.**

2708 Normandy Avenue, Chicago 35, Illinois

STYRENE • ACETATE • POLYETHYLENE • RIGID POLYETHYLENE • BUTYRATE • COPOLYMER STYRENE • NYLON

America reaches for MICHIGAN Cartons!

"JIFFY"
TRADE MARK REG. U. S. PAT. OFF.
NET WT. 8½ OZ.
Contains: Bleached Enriched Flour, Shortening, Sugar, Non-Fat Dry Milk Solids, Phosphate Baking Powder, Salt.
BISCUIT MIX
CHELSEA MILLING COMPANY • CHELSEA, MICH.

YOU can rely on helpful personal service from your Michigan Carton salesman

FIFTY ONE YEARS OF EXCEPTIONAL SERVICE

MICHIGAN CARTON CO. *Battle Creek, Michigan*

Designs of matchless beauty

. . . on metal

When your package design is transferred to metal, it takes on new richness and warmth. Nothing can replace the good impression metal makes. Continental artists and craftsmen know the capabilities of metal as they know their own professions and trades. Their rich experience yields designs of matchless beauty for hundreds of quality products.

CONTINENTAL CAN COMPANY

Eastern Division: 100 E. 42nd St., New York 17
Central Division: 135 So. La Salle St., Chicago 3
Pacific Division: Russ Building, San Francisco 4
Canadian Division: 5595 Pare St., Montreal, Que.